

Sport Hunting  
Decision Document Package  
for  
**RED RIVER NWR**

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Sport Hunting  
Decision Document Package  
for  
**RED RIVER NWR**

**Contents**

1. Sport Hunting Plan

# SPORT HUNTING PLAN

UNITED STATES FISH AND WILDLIFE SERVICE

RED RIVER NATIONAL WILDLIFE REFUGE

NOVEMBER 2008

Recommended by Pat H. Smith Date: 12/10/08  
Refuge Manager

Reviewed by Richard P. Johnson Date: 12/11/08  
Refuge Supervisor

Concurrence by [Signature] Date: 01/14/09  
Regional Chief, NWRS

Approved: [Signature] Date: 1/15/09  
Regional Director

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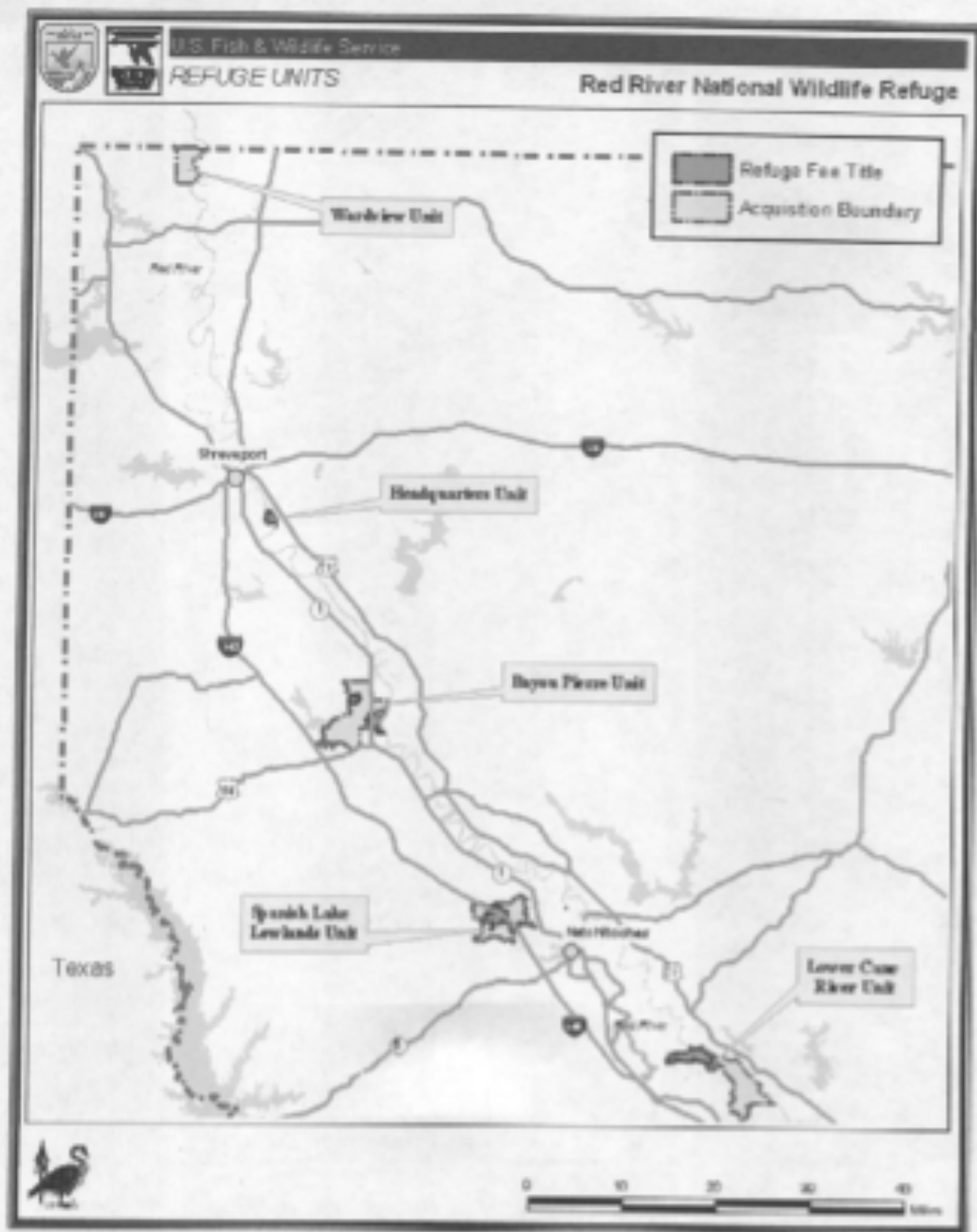


Figure 1. Location of Red River National Wildlife Refuge.

## I. INTRODUCTION

On October 13, 2000, House Resolution 4318, the Red River National Wildlife Refuge Act, was signed into law (Public Law 106-300). This legislation authorized the establishment of the Red River NWR to provide for the restoration and conservation of fish and wildlife habitats in the Red River Valley ecosystem in northwest Louisiana. The legislation that established the refuge stated that the refuge shall consist of up to 50,000 acres of federal lands, waters, and interests therein within the boundaries of Colfax, Louisiana, to the Arkansas State line (Figure 1). Currently, the refuge has acquired less than a fifth of the allowed 50,000 acres. The legislation allowed that when the Service acquired sufficient property within these boundaries to constitute an area that could be effectively managed as a national wildlife refuge, then the establishment of the refuge would take effect. Sufficient property was acquired and the refuge was established on August 22, 2002, with the initial purchase of 1,377 acres in the Spanish Lake Lowlands Focus Area at a cost of one million dollars. To guide land acquisition efforts, the Service identified four focus areas plus an additional area to establish a proposed headquarters and visitor center site, within the approved selection areas. These four units comprise the refuge, with a Headquarters Unit near the Shreveport and Bossier City area. The focus areas include Lower Cane River (Natchitoches Parish); Spanish Lake Lowlands (Natchitoches Parish); Bayou Pierre Floodplain (DeSoto and Red River Parishes); and Wardview (Caddo and Bossier Parishes).

Currently, the Service has acquired 9,787.90 acres and has 40,212.08 acres remaining to purchase. The lands within the five units (the Wardview, Headquarters, Spanish Lake Lowlands, Bayou Pierre, and Lower Cane River focus areas) will be acquired through a combination of fee title purchases from willing sellers and conservation easements, leases, and/or cooperative agreements from willing landowners. Currently, fee title lands have been purchased within portions of all the focus areas except Wardview.

The five units of the refuge currently include 3,742 acres of reforested bottomland hardwood forest; 317 acres of bottomland forest; 261 acres of riparian habitat; 194 acres of cypress swamp; 600 acres of moist soils; 1,125 acres of agricultural fields; 124 acres in a pecan orchard, acres dominated by groundsel-tree (*Baccharis halimifolia*); a 217-acre area of honey locust; and a 153-acre old field that was grazed and currently invaded by wild plum and invasives. In addition, about 443 acres of the refuge are permanent water, consisting of oxbow lakes, tributaries of the Red River, borrow pits, and irrigation ditches.

## **II. CONFORMANCE WITH STATUTORY AUTHORITY**

The federally legislated purposes for which the refuge was established are as follows:

1. To provide for the restoration and conservation of native plants and animal communities on suitable sites in the Red River basin, including restoration of extirpated species;
2. To provide habitat for migratory birds; and
3. To provide technical assistance to private landowners in the restoration of their lands for the benefit of fish and wildlife (114 Stat. 1056, dated October 13, 2000).

The legislation supports the priority public use provisions of the National Wildlife Refuge System Improvement Act of 1997. Hunting as specified in this plan is a wildlife-dependent recreational use and the law states that as such, it "shall receive priority consideration in national wildlife refuge planning and management." The Secretary of Interior may permit hunting on a refuge if he/she determines that such use is compatible with the refuge purpose for which it was established. The hunting program would not materially interfere with or detract from the fulfillment of the purposes of the Refuge or mission of the National Wildlife Refuge System (603 FW).

Public hunting on Red River NWR is an appropriate and compatible form of wildlife oriented public recreation which is compatible with the purpose for which the refuge was established. Hunting, being a viable management tool when used wisely, often inhibits the overpopulation of species within a given habitat community and can provide for greater wildlife diversity. In this way the environment is preserved for the benefit of a variety of wildlife. The hunting program is designed to minimize potential conflicts with Refuge purposes. Hunting of big game (whitetail deer, turkey, feral hogs), small game (squirrel, rabbit, quail, raccoon, opossum, beaver, coyote), and migratory birds (doves, ducks, gallinules, snipe, woodcock, coots, geese, and rails) are permitted except within designated closed areas.

Annual hunt administration costs including salary, equipment, waterfowl boundary, sign maintenance, fuel, etc. total \$20,000. Less than one full time employee equivalent is expended in conducting hunt-related activities. Funds are available to meet the conditions set forth in the Refuge Recreation Act. It is anticipated that funding would continue to be sufficient to continue the hunting program in the future. In summary, funds are available to continue the existing hunt program and proposed hunting activities should not interfere with the primary purposes for which the refuge was established.

## **III. STATEMENT OF OBJECTIVES**

Hunting and fishing are integral parts of Louisiana culture. It is not surprising that there is considerable state and local interest in expanding hunting opportunities. Any additional hunting opportunities will depend on whether the refuge can provide safe, quality

experiences that are compatible with refuge purposes. Hunting on newly acquired lands will be conducted in accordance with refuge purposes reflected in the authorizing legislation and Refuge System policy. If lands within the current refuge acquisition boundary are acquired, the number of hunting opportunities and hunting visits could be increased. Hunting seasons will be scheduled and managed to ensure that negative effects to nongame wildlife and migratory birds are minimized during critical periods. Hunting seasons will be set in close coordination with the LDWF.

The objectives of the refuge hunt program are as follows:

- 1) To provide opportunities for high quality hunting experiences.
- 2) To maintain the deer, coyote, beaver, raccoon and opossum populations at levels compatible with seasonal habitat carrying capacities.
- 3) To allow compatible public use of a valuable renewable resource.

Conducting a well-managed hunt programs on Red River National Wildlife Refuge would assist the refuge in meeting one of its primary objectives, which provides the general public with quality wildlife-oriented recreational programs that are compatible with the purposes for which it was established.

Refer to Decision Document Package, Environmental Assessment for additional information.

#### **IV. ASSESSMENT**

##### **1. Compatibility with Refuge Objectives**

Hunting is one of the six wildlife-oriented recreational uses prioritized by the Refuge Improvement Act of 1997. The Secretary of Interior may permit hunting on a refuge if he/she determines that such use is compatible with the refuge purpose for which it was established. The hunting program would not materially interfere with or detract from the fulfillment of the purposes of the Refuge or mission of the National Wildlife Refuge System (603 FW).

##### **2. Biological Soundness**

###### Deer

Deer hunts have proven to be not only compatible with refuge objectives but also beneficial in meeting them. Deer harvest is essential to maintain the herd at or below habitat carrying capacity. When deer are overpopulated, they overbrowse their habitat, which can completely change the plant composition of a forest. The refuge has reforested approximately 4,400 acres with bottomland hardwood tree species in recent years. Young tree seedlings (1-6 years old) can be killed by overbrowsing. Failure to

establish this bottomland hardwood forest will have negative impacts on future resident and non-resident wildlife populations. Furthermore, the cost of purchasing and planting the trees was largely born by energy companies for carbon sequestration, legally mandating that the refuge protect the energy companies' investments. Overpopulation can also lead to outbreaks of devastating diseases such as EHD and bluetongue which have been found locally in overpopulated herds. Overpopulation also leads to starvation, increased car-deer collisions and poor overall herd health. The expansion of hunting on additional refuge lands should not negatively impact the deer herd.

### Feral Hogs

Feral hogs are an extremely invasive introduced, non-native species. They can harbor several infectious diseases, some of which can be fatal to wildlife. By rooting and wallowing, feral hogs destroy wildlife habitat. Damage includes erosion along waterways and wetlands and the loss of native plants. Additionally, feral hogs compete directly for food with deer, bears, turkeys, squirrels and many other birds and mammals. They are predators of small mammals and deer fawns as well as ground-nesting birds such as turkeys. Hunting of feral hogs provides the refuge with another management tool in reducing this detrimental species, and at the same time, is widely enjoyed by local hunters.

### Wild Turkey

Turkey hunting on the refuge is currently closed. State biologists with the Louisiana Dept of Wildlife & Fisheries (LDWF) have trapped and banded turkeys in North Louisiana for the past several years. Data from banding indicate that turkey harvest rates of 15 % for north Louisiana during 2002-06 is well below the scientifically based threshold of 40%. LDWF with help from refuge staff, conducts turkey brood surveys each spring adjacent to the refuge. Data indicate that poults per hen ratios average 3.5 over the past 11 years, which is considered "very good" by the Southeast Wild Turkey Technical Committee. These data indicate that the local turkey population has withstood hunting on surrounding private lands for several years without a negative cumulative effect on turkeys. Therefore hunting turkeys on the refuge should not adversely impact the population.

### Migratory Birds

Currently 90% of the waterfowl habitat on the refuge is closed to waterfowl hunting, providing ducks and geese with ample sanctuary. Some minor disturbances to waterfowl from small game and big game hunters occur as they make visual and audible contact with ducks using the numerous brakes, sloughs, etc. on the refuge. Due to the relatively low density of hunters using the refuge, this manner of disturbance is minimal.

The current migratory bird hunts are limited to ducks, woodcock, coots, and geese. Demand for woodcock hunting is limited as most habitat is usually flooded during much of the season. Snipe, coots and rails are not popular game species in North Louisiana and



are hunted by relatively few. Although hunting of snipe, gallinules, coots, and rails is not as popular in North Louisiana as in South Louisiana, the refuge adopts the season set by the state of Louisiana within the Service's Migratory Bird Hunting Frameworks. Dove hunting is currently closed.

#### Small Game (Squirrel, Rabbit, Raccoon, Opossum, Coyote, Beaver and Quail)

Quail hunting on the refuge is very limited because of a lack of required early successional habitat. Opossum and raccoon are hunted primarily at night. Raccoon are more sought after than opossum by the public. Raccoon and opossum are overpopulated depredating turkey, turtle, and songbird nests at high rates. In North Louisiana, research conducted on one population of alligator snapping turtles has shown that raccoons are responsible for depredating 93% of turtle nests. Hunting helps regulate opossum and raccoon populations; however, unless the popularity of this type of hunting increases, raccoons and opossums numbers will always be higher than desired. When these species become extremely overabundant, diseases such as distemper and rabies reduce the populations. However, waiting for disease outbreak to regulate their numbers can be a human health hazard.

Although no studies have been conducted on small game within the refuge, studies have been conducted within and outside of Louisiana to determine the effects of hunting on the population dynamics of small game. Results have consistently shown that small game, such as rabbits and squirrels, are not affected by hunting, but rather are limited by food resources. Gray squirrels, fox squirrels, eastern cottontails, and swamp rabbits are prolific breeders and their populations have never been threatened by hunting in Louisiana even prior to the passing of modern hunting regulations.

Coyotes and beaver are overpopulated and can have adverse effects on their habitats. Coyotes depredate small mammals, songbirds and their nests, turkey and quail nests and any other animal they opportunistically encounter. When coyote numbers are high, local wildlife populations can be negatively affected. Beavers can impact thousands of acres of bottomland hardwood trees by damming sloughs and brakes. Forests inundated into the growing season quickly show signs of stress and trees eventually die. Hunting of both coyotes and beaver is will minimize their negative impacts to priority wildlife species and to habitat management objectives.

### **3. Economic Feasibility**

Annual hunt administration costs including salary, equipment, waterfowl boundary and sign maintenance, fuel, etc. total \$20,000. Less than 1.0 full time staff equivalent is expended in conducting hunt-related activities. Funds are available to meet the conditions set forth in the Refuge Recreation Act. It is anticipated that funding would continue to be sufficient to continue the hunting program in the future.

#### **4. Relationship with other Refuge Programs**

None of the proposed hunts offer major conflicts with other hunts or with non-consumptive users. The spring turkey hunt does not coincide with any other hunting season. Deer gun hunting is limited in duration (usually 7-9 days) and could only potentially conflict with squirrel and rabbit hunting. However, squirrel and rabbit hunting is conducted in the same areas but are usually not utilized by hunters during the deer hunts. Archery hunting of deer is the entire State deer season but rarely conflicts with other hunts. Few non-consumptive users utilize the refuge. If the non-consumptive visits increase in the future, areas of the refuge can be closed to hunting in an effort to provide an opportunity for wildlife observation and photography.

#### **5. Recreational Opportunity**

The nature of Red River NWR dictates that much of the area will be under-utilized as compared to other areas its size. Several factors contribute to this situation. Foremost, the fee title land base is minimal, with very little public access, and broken into multiple units. ATV trails are available during hunting season to help with this issue. As acquisition continues, management foresees an increase in this use.

### **V. DESCRIPTION OF HUNTING PROGRAM**

The entire refuge is opened to hunting of all game species. Refuge hunts and/or portions of the refuge may be closed at any time by the Refuge Manager when biological or safety issues arise. Regulations will be published annually in the Code of Federal Regulations and in the refuge hunting brochure.

Hunted species include small game (squirrel, rabbit, raccoon, opossum, quail, coyote, beaver), big game (deer, feral hogs, turkey), and migratory birds (woodcock, gallinules, rail, snipe, dove, coots, geese, ducks). Seasons and bag limits may be more restrictive but not more liberal than those set by the state of Louisiana.

Annual consultation with the Louisiana Department of Wildlife and Fisheries will continue. Spring meetings are held prior to the State finalizing their regulations to ensure that any changes are properly coordinated. Proposed hunts that are more restrictive than state regulations include waterfowl, turkey, raccoon, opossum, and deer (gun). All hunters are required to use non-toxic shot. The refuge gun deer hunt would fall within the state season. Either-sex hunting would be allowed, not to exceed those days allowed by the State. Archery deer hunting is open for the full state season. Feral hogs, coyotes, and beavers would be hunted during all open refuge hunting periods. Legal weapons would be limited to those permitted for the ongoing hunt.

Enforcement of hunt regulations would primarily be carried out by the full-time refuge law enforcement officer, supplemented with assistance from two other refuge officers when needed. No check stations would be used unless volunteers are available. Inadequate access makes the typical check station impracticable. It is estimated that 1.0

full-time equivalent involving three employees would be required to perform the minimal duties associated with refuge hunts. Cost for salaries, materials and equipment upkeep would be approximately \$20,000 annually.

## **VI. MEASURES TAKEN TO AVOID CONFLICTS WITH OTHER MANAGEMENT OBJECTIVES**

### **A. Biological Conflicts**

Refer to the Decision Document Package, Section 7 Evaluation.

To date, there is no indication of adverse biological impacts associated with the complex's hunting program. However, should it become necessary, the refuge has the latitude to adjust hunting seasons and bag limits annually, or to close the refuge entirely if there are safety issues or other concerns that merit closure. This latitude, coupled with monitoring of wildlife populations and habitat conditions by the Service and the Louisiana Department of Wildlife and Fisheries, will ensure that long-term negative impacts to either wildlife populations and/or habitats on the refuge are unlikely. Should hunting pressure increase on the refuge, alternatives such as quota hunts, a reduction in the number of days of hunting, or restrictions on that part of the refuge open to hunting can be utilized to limit impacts.

### **B. Public Use Conflicts**

The refuge attracts little non-consumptive use. A "no hunting area" will always be set aside for wildlife observation and photography to minimize conflicts between hunters and non-consumptive users.

There are no known conflicts between other groups of consumptive users. The greatest competition for hunting areas occurs during the opening week of squirrel season and during duck hunts. This issue is usually self-regulating by hunters spacing themselves out.

### **C. Administrative Conflicts**

The manpower and funding available to administer this hunt are adequate current assets. Presently, little labor intensive data is collected during the hunts. Staggered tours of duty by law enforcement personnel minimizes manpower shortages.

## **VII. CONDUCT OF THE HUNTING PROGRAM**

### **A. Refuge-specific hunting regulations**

Refuge-specific hunting regulations for this program:



A. *Migratory Game Bird Hunting.* Hunting of waterfowl (duck, goose, coot, gallinule, rail, snipe), woodcock, and dove are allowed on designated areas of the refuge in accordance with State regulations subject to the following conditions:

1. Hunters must possess and carry a signed refuge permit.
2. Waterfowl hunting is allowed until 12 p.m. (noon) during the State season.
3. Hunters may enter the refuge no earlier than 4 a.m.
4. Hunting is prohibited within 100 feet of the maintained rights of ways of roads, from or across ATV trails, and from above ground oil, gas or electrical transmission facilities.
5. Leaving boats, blinds, and decoys unattended is prohibited.
6. Recognized dog breeds are only allowed to locate, point, and retrieve when hunting for migratory game birds.
7. Youth hunters under age 16 must successfully complete a State-approved hunter education course. While hunting, each youth must possess and carry a card or certificate of completion. Each youth hunter must remain within sight and normal voice contact of an adult age 21 or older. Each adult may supervise no more than two youth hunters.
8. It is prohibited for any person or group to act as a hunting guide, outfitter, or in any other capacity that pay other individual(s), pays or promises to pay directly or indirectly for service rendered to any other person or persons hunting on the refuge, regardless of whether such payment is for guiding, outfitting, lodging, or club membership.

B. *Small Game Hunting.* Hunting of quail, squirrel, rabbit, raccoon, beaver, coyote, and opossum is allowed on designated areas of the refuge in accordance with State regulations subject to the following conditions:

1. Conditions A1, A4, A5, A7, and A8 (to hunt small game) apply.
2. Possession of firearms larger than .22 caliber rimfire, shotgun slugs, and buckshot is prohibited.
3. Hunting of raccoon and opossum is allowed during the daylight hours of rabbit and squirrel season. Night hunting is allowed during December and January, and dogs may be used for night hunting. The selling of raccoon and opossum taken on the refuge for human consumption is prohibited.

4. The use of dogs is allowed to hunt squirrel and rabbit after the last refuge Gun Deer Hunt.
  5. To use horses and mules to hunt raccoon and opossum at night, a special use permit must first be obtained at the refuge office.
  6. Hunters may enter the refuge no earlier than 4 a.m. and must exit no later than 2 hours after legal shooting hours.
  7. Beaver and coyote can be hunted during all open refuge hunts with weapons legal for the ongoing hunt.
- C. *Big Game Hunting.* Hunting of white-tailed deer, feral hogs, and turkey is allowed on designated areas of the refuge in accordance with State regulations subject to the following conditions:
1. Conditions A1, A4, A5, A7, and A8 (to hunt big game), and B6 apply.
  2. General gun deer hunting is allowed on the days noted. Archery deer hunting is allowed during the entire State season.
  3. The daily bag limit is one either-sex deer. The State season limit applies.
  4. Archery hunters must possess and carry proof of completion of the International Bowhunters' Education Program.
  5. Leaving deer stands, blinds, and other equipment unattended is prohibited.
  6. Deer hunters must wear hunter orange as per State deer hunting regulations on Wildlife Management Areas.
  7. Possession or distribution of bait or hunting with the aid of bait, including any grain, salt, minerals, or other feed or nonnaturally occurring attractant on the refuge is prohibited.
  8. Hogs may be hunted during all open refuge hunts with weapons legal for the ongoing hunt.

#### **B. Anticipated Public Reaction to the Hunt**

The public has generally supported the refuge hunting program with exceptions usually being a demand for more hunting, more access and longer seasons. Generally, the local public desires more hunting than less on the refuge. Public reaction from surrounding communities to all refuge hunts has been very favorable and should continue to be the same in the future. Nationally, there are some anti-hunting sentiments, and many organizations are opposed to hunting on national wildlife refuges. It is possible that some objections may be voiced to some or all of the hunts within this plan.

### **C. Hunter Application Procedures**

None required for open refuge hunts.

To hunt raccoon and opossum at night, a special use permit must first be obtained at the refuge office

Applications may be required for youth hunts.

### **D. Description of Hunter Selection Process**

None required for open refuge hunts.

The youth hunts are selected by lottery.

### **E. Media Selection for Publicizing the Hunt**

Newspapers throughout north Louisiana are provided copies of an annual news release covering hunts. Brochures are printed and dispensed at the refuge office and local stores.

### **F. Description of Hunter Orientation**

No specific effort is made toward hunter orientation other than previously mentioned media coverage, brochures and personal contacts. Pre-hunt scouting is allowed since non-consumptive wildlife observation is open year round.

### **G. Hunter Requirements**

(1) Age: Region 4 policy is adopted. In summary, all youth under age 16 must complete a hunter education course and carry a relevant card or certificate. Youths must be closely supervised (in sight and in normal voice contact) by an adult at least 21 years old. An adult may supervise only one youth under 16 years old on a big game hunt and no more than two youths under 16 years old on a small game or waterfowl hunt.

(2) Allowable equipment: Boats, deer stands, blinds, decoys and other personal property must be removed at the end of each day's hunt. Vehicles are restricted to designated public use roads. ATVs are restricted to marked ATV trails. Dogs are prohibited except for hunting quail, woodcock, ducks, raccoon, and opossum during refuge season and for hunting rabbits and squirrels after the refuge deer gun season ends. Horses and mules are allowed only by special use permit during raccoon season. Weapons are allowed during open hunting season and are limited to those allowed by the State. Additional weapon restrictions apply: firearms larger than .22 caliber rimfire, shotgun slugs or shells with shot larger than no. 2 shot are allowed only during the refuge gun deer season. Toxic shot is prohibited.

- (3) All hunters must wear 400 square inches of hunter orange as an outside garment above the waist and an orange hat during the gun deer hunt.
- (4) Use of open fires: Open fires are not allowed. Camp stoves, cookers or contained fires are acceptable.
- (5) License and permits: Hunting permit on brochure required. The license requirements are those required by the State of Louisiana and the federal duck stamp.
- (6) Reporting harvest: No requirements for reporting kill are proposed. Poor access over a large area provides little hunter contact and makes data collection difficult. A questionnaire would be considered in the future.
- (7) Hunter safety requirements: All hunters born on or after September 1, 1969 are required to complete a firearm and hunter education course.

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**Contents**

2. EA

Environmental Assessment

**2008 Sport Hunt Plan**

on

**RED RIVER NATIONAL WILDLIFE REFUGE**  
Bossier, Red River, Desoto and Natchitoches Parishes, Louisiana

For Further Information, Contact:  
Refuge Manager  
U. S. Fish and Wildlife Service  
Red River National Wildlife Refuge  
555 Sunflower Road  
Bossier City, LA 71112

Prepared by:  
U. S. Department of Interior  
Bossier City, Louisiana  
November 2008

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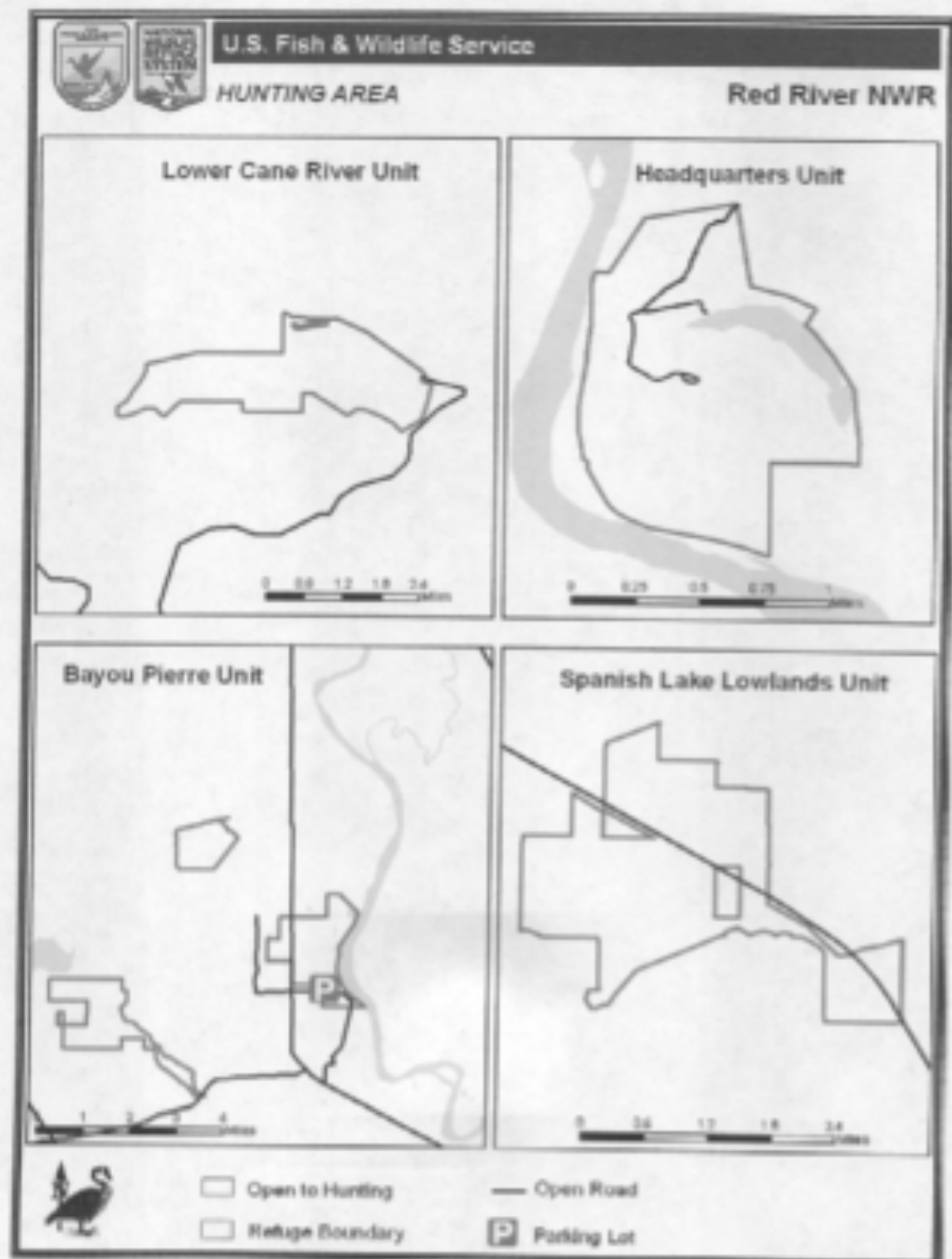


Figure 1. Hunting areas as proposed in 2008 Sport Hunting Plan for Red River NWR.



## Chapter 1 Purpose and Need for Action

The federally legislated purposes for which Red River National Wildlife Refuge (NWR) was established are 1. To provide for the restoration and conservation of native plants and animal communities on suitable sites in the Red River basin, including restoration of extirpated species; 2. To provide habitat for migratory birds; and 3. To provide technical assistance to private landowners in the restoration of their lands for the benefit of fish and wildlife (114 Stat. 1056, dated October 13, 2000).

The National Wildlife Refuge System Administration Act of 1966 as amended by the National Wildlife Refuge System Improvement Act of 1997 (16 U.S.C. 668dd et seq.) provides authority for the Service to manage the Refuge and its wildlife populations. In addition it declares that compatible wildlife-dependent public uses are legitimate and appropriate uses of the Refuge System that are to receive priority consideration in planning and management. There are six wildlife-dependent public uses: hunting, fishing, wildlife observation, wildlife photography, environmental education and interpretation. It directs managers to increase recreational opportunities including hunting on National Wildlife Refuges when compatible with the purposes for which the Refuge was established and the mission of the National Wildlife Refuge System.

The purpose of this Environmental Assessment is to evaluate the feasibility of opening Red River National Wildlife Refuge to hunting on previously closed land and future acquisitions.

The proposed action is needed to implement the 2008 Sport Hunting Plan for Red River NWR which would provide the public with a high quality recreational experience and provide the refuge with a wildlife management tool to promote the biological integrity of the refuge.

## **Chapter 2      Alternatives Including the Proposed Action**

This chapter discusses the alternatives considered for hunting on Red River National Wildlife Refuge. These alternatives are the 1) no action which continues with current management of the hunt program and 2) proposed action which implements the Refuge's 2008 Sport Hunting Management Plan

### **2.1 No Action Alternative: Current Management**

Under this alternative, hunting would be limited to the approximately 2,500 acres currently open to hunting and to species currently allowed to be hunted, including deer, feral hogs, ducks, geese, coots, quail, woodcock, squirrel, rabbit, raccoon, opossum, coyote, and beaver. Turkey, dove, gallinules, rails, and snipe hunting would not be permitted, and the remaining refuge acreage would remain closed to hunting. There would be no change to current public use and wildlife management programs.

### **2.2 Proposed Action: 2008 Sport Hunting Plan for Red River NWR**

The proposed action would open to hunting all lands of Red River NWR (Figure 1), but could administratively limit it to those areas specified in the refuge-specific regulations. All or parts of the refuge could be closed to hunting at any time if necessary for public safety, to provide wildlife sanctuary, or for administrative reasons.

Refer to 2008 Sport Hunting Plan for Red River NWR for specific regulations.

## **Chapter 3      Affected Environment**

On October 13, 2000, House Resolution 4318, the Red River National Wildlife Refuge Act, was signed into law (Public Law 106-300). This legislation authorized the establishment of the Red River NWR to provide for the restoration and conservation of fish and wildlife habitats in the Red River Valley ecosystem in northwest Louisiana. The legislation that established the refuge stated that the refuge shall consist of up to 50,000 acres of federal lands, waters, and interests therein within the boundaries of Colfax, Louisiana, to the Arkansas State line. Currently, the refuge has acquired less than a fifth of the allowed 50,000 acres. The legislation allowed that when the Service acquired sufficient property within these boundaries to constitute an area that could be effectively managed as a national wildlife refuge, then the establishment of the refuge would take effect. Sufficient property was acquired and the refuge was established on August 22, 2002, with the initial purchase of 1,377 acres in the Spanish Lake Lowlands Focus Area at a cost of one million dollars. To guide land acquisition efforts, the Service identified four focus areas plus an additional area to establish a proposed headquarters and visitor center site, within the approved selection areas. These four units comprise the refuge, with a Headquarters Unit near the Shreveport and Bossier City area. The focus areas include Lower Cane River (Natchitoches Parish); Spanish Lake Lowlands (Natchitoches Parish); Bayou Pierre Floodplain (DeSoto and Red River parishes); and Wardview (Caddo and Bossier parishes). Figure 1 illustrates these locations.

Currently, the Service has acquired 9,787.90 acres and has 40,212.08 acres remaining to purchase. The lands within the five units (the Wardview, Headquarters, Spanish Lake Lowlands, Bayou Pierre, and Lower Cane River focus areas) will be acquired through a combination of fee title purchases from willing sellers and conservation easements, leases, and/or cooperative agreements from willing landowners. Currently, fee title lands have been purchased within portions of all the focus areas except Wardview.

### **3.1 Physical Environment**

The topography of the refuge has been greatly influenced by the actions of the Red River and much of the geology is from Quaternary alluvial deposits. Although the continental ice sheets did not reach this far south, the lower Red River valley carried glacial meltwaters and outwash in a braided-stream pattern that concurrently widened and aggraded the valley during periods of waning glaciation. As each glacial cycle progressed and the sediment loads and stream discharges declined, the river abandoned its braided stream configuration in favor of a single-channel meandering pattern. This alluvium has been sorted, reworked, and deposited many times by riverine processes. The Red River has a narrow floodplain, averaging 6 to 8 miles in width. The lands in the valley can, in general, be classified as alluvial floodplain or terrace uplands. The formations of alluvium described above comprise the bulk of the refuge. Relict channels and natural levees, often referred to as ridge and swale topography, are easily seen by visitors to the

refuge. Human disturbances, including artificial levees and channelization projects, have drastically altered these natural alluvial processes within the Red River floodplain. The elevation at the refuge averages 150 feet above sea level at its lower end below Natchitoches to 250 feet near the Arkansas border. The topography is complex, with numerous stream channels, small tributaries and depressions, old river meanders and oxbow lakes, multiple river terraces in various stages of erosion and deposition, and adjacent poorly drained lowlands. Added to this complexity are farming activities that have modified the hydrology of the area, resulting in a subtle but complex topography that has given rise to the flora and fauna found on the refuge.

The soils of the floodplains range from loamy to clayey and from well-drained to very poorly drained. The loamy soils are on higher, natural levees of rivers and bayous. These soils are fertile and have few limitations for crops. Some of the clayey soils are flooded by runoff and stream overflow. The clayey soils, which are in the lower areas, are limited by wetness. The soils historically supported a diverse bottomland hardwood forest. Red River NWR is within the West Gulf Coastal Plain and is a part of the Lower Mississippi River Ecosystem.

### 3.2 Vegetation

The five units of the refuge currently include 3,742 acres of reforested bottomland hardwood forest; 317 acres of bottomland forest; 261 acres of riparian habitat; 194 acres of cypress swamp; 600 acres of moist soils; 1,125 acres of agricultural fields; 124 acres in a pecan orchard, acres dominated by groundsel-tree (*Baccharis halimifolia*); a 217-acre area of honey locust; and a 153-acre old field that was grazed and currently invaded by wild plum and exotics. In addition, about 443 acres of the refuge are permanent water, consisting of oxbow lakes, tributaries of the Red River, borrow pits, and irrigation ditches.

The cleared bottomlands have been replanted in species that are indicative of historic bottomland hardwood forests, which include willow oak, water oak, overcup oak, Nuttall oak, shumard oak, cherrybark oak, sweet pecan, sycamore, sweetgum, green ash and baldcypress.

Bottomland hardwood forests can be classified in this area into four primary habitat types:

1. Baldcypress (*Taxodium distichum*) – Water Tupelo (*Nyssa aquatica*)
2. Overcup Oak (*Quercus lyrata*) – Water Hickory (*Carya aquatica*)
3. Sweetgum (*Liquidambar styraciflua*) – Willow Oak (*Quercus phellos*)
4. Swamp Chestnut Oak (*Quercus michauxii*) – Cherrybark Oak (*Quercus pagoda*)

#### Baldcypress – Water Tupelo

Baldcypress and water tupelo together make up the majority of stocking in this forest type, which occurs in swamps, deep sloughs, and very low poorly drained flats. The sites are always very wet, and surface water stands well into or throughout the growing season. Soils are generally mucks, clays, or fine sand. Common trees associated with this type are black willow (*Salix nigra*), water locust (*Gladiolus aquatica*), overcup oak, green ash

(*Fraxinus pennsylvanica*), and persimmon (*Diospyros virginia*). Among the shrub species are swamp privet (*Forestiera acuminata*), buttonbush (*Cephalanthus occidentalis*), and planartree (*Planera aquatica*). Woody vines include redbone (*Brunnichia ovata*). A variety of herbaceous plants will be commonly seen and take the form of floatants, emergents, and submergents. Frequently, a variety of mosses and lichens adorn the exposed tree trunks, and the crowns may be draped with Spanish moss (*Tillandsia usneoides*).

#### **Overcup Oak – Water Hickory**

This type usually occurs in low, poorly drained flats and sloughs with tight clay or silty clay soils. These sites are the lowest within the first bottoms and are subject to late spring inundations. Overcup oak and water hickory together constitute the majority. Associates include willow oak, Nuttall oak (*Quercus nuttallii*), cedar elm (*Ulmus crassifolia*), green ash, and water locust. Minor associates include black willow, persimmon and sweetgum. Common shrub species often associated include redbone, peppervine (*Ampelopsis brevipedunculata*), trumpet-creeper (*Campsis radicans*), dewberry (*Rubus caesius*), and possibly greenbrier (*Smilax* spp.). Panicums, asters, annual grasses, and cocklebur (*Xanthium strumarium*) may occur in openings within the stand.

#### **Sweetgum – Willow Oak**

The low ridges in the broad slackwater areas of the first bottom are typically occupied by this forest type. Willow oak and sweetgum comprise the largest proportion of the stocking in stands of this type. A major associate on higher clay ridges and flats is Nuttall oak. Other trees associated with this forest type are sugarberry (*Celtis laevigata*), green ash, overcup oak, water oak (*Quercus nigra*), water hickory, cedar elm, persimmon, and sometimes baldcypress. Common shrubs include swamp privet, American snowbell (*Styrax americana*), possumhaw (*Viburnum nudum*), hawthorn (*Crataegus douglasii*), and dull-leaf indigo (*Amorpha fruticosa*). Woody vines occasionally present include greenbrier, peppervine, and redbone.

#### **Swamp Chestnut Oak – Cherrybark Oak**

This forest type occurs on the best, most mature, fine sandy loam soils on the highest of the first bottom ridges and hammocks, and on the second bottoms or terraces down from the ridges. These well-drained sites are seldom covered with standing water and only rarely overflow. Species composition of this habitat type varies widely, though cherrybark oak will most likely be much more common than swamp chestnut oak. Many other species contribute to a well-stocked stand: white oak (*Quercus alba*); post oak (*Quercus stellata*); sweetgum; blackgum (*Nyssa sylvatica*); hickory (*Carya* spp.); willow oak; water oak; southern red oak (*Quercus falcata*); winged elm (*Ulmus alata*); sassafras (*Sassafras albidum*); slippery elm (*Ulmus rubra*); Shumard oak (*Quercus shumardii*); black oak (*Quercus velutina*); black cherry (*Prunus serotina*); white ash (*Fraxinus americana*); green ash; red maple (*Acer rubrum*); and loblolly (*Pinus taeda*) and shortleaf pines (*Pinus echinata*). Common midstory plants include eastern redbud (*Cercis canadensis*); flowering dogwood (*Cornus florida*); American holly (*Ilex opaca*); red mulberry (*Morus rubra*); American hornbeam (*Carpinus caroliniana*); eastern hophornbeam (*Ostrya virginiana*); and witch-hazel (*Hamamelis virginiana*). Shrub species usually include red buckeye (*Aesculus pavia*), devil's walkingstick (*Aralia spinosa*), sweetleaf (*Symplocos tinctoria*), and *Viburnum* spp. Often included in this



habitat type are grape vines (*Vitis rotundifolia*), Alabama supplejack (*Berchemia scandens*), Carolina jessamine (*Gelsemium sempervirens*), trumpet creeper, and greenbrier.

The four bottomland hardwood types described above are found only in remnants over most of the units of the refuge. It is the desire of refuge management to replicate these types where appropriate on the refuge. The cleared bottomlands have been reforested with species that are indicative of bottomland hardwood forests, including willow oak, water oak, overcup oak, Nuttall oak, shumard oak, cherrybark oak, sweet pecan (*Carya illinoensis*), sycamore (*Platanus occidentalis*), sweetgum, green ash and baldcypress. The outcome will be structurally diverse bottomland hardwood forest ecosystems that support a variety of forest-dependent wildlife species. Moist-soil plant species vary depending on the timing of drawdowns and soil disturbance, but usually consist of panic grass (*Panicum* spp.), sprangletop (*Leptochloa* spp.), millet (*Pennisetum americanum*), toothcup (*Rotala ramosior*), coffeeweed (*Senna obtusifolia*), *Paspalum*, *Polygonum*, and a variety of sedges (*Andropogon* spp.). Due to a lack of resources, active moist-soil management has not been possible to date on Red River NWR. Proper moist-soil management is very labor-intensive, requiring soil disturbance through disking and leaving fallow, or planting a food crop using cooperative farming or forced-account work to help set back succession every 2 to 4 years. Often, much of this habitat type can be obtained in conjunction with rice farming, which is currently being done on the Lower Cane River Unit, but other sites will need to be identified as primary moist-soil areas. The keys to success of such areas are moisture and water control (levees, pumps, water control structures, ditches and monitoring). Without excellent water control, moist-soil management in the southeast is a hit or miss activity. Timing of inundation, adequate disturbance, and sustained record-keeping are needed to assure good production on a yearly basis.

At Red River NWR, grain production is used to address the shortages to effectively manage moistsoil habitat. Under current funding and staffing limitations, cooperative farming is the only option available to the refuge to produce crops. Rice, milo, and corn are the top choices as grain crops for ducks. Rice is particularly resistant to decomposition even under flooded conditions. Milo and corn also provide high energy resources for waterfowl and can generally be kept above the water surface, but problems arise from depredation prior to flooding, as well as seed degradation after flooding. It is important to manage the farm program to provide the best mix of waterfowl foods.

### **3.3 Wildlife Resources**

Wildlife species found on the refuge are typical of bottomland hardwood forests, moist soils, and early successional forest habitat. The refuge provides habitat for thousands of wintering ducks and geese and year-round habitat for nesting wood ducks. Although no large rookeries are located on the refuge, thousands of wading and water birds, such as white ibis, herons, egrets, wood storks, cormorants, and anhingas, forage in the sloughs, bayous, moist-soil units and in the agricultural fields. Many Neotropical migrants breed on the refuge while other species use the refuge during migration, especially along the Red River. Resident game species include fox and gray squirrels, swamp and eastern cottontail rabbits, and white-tailed deer. Furbearers present include opossum, muskrat,

nutria, mink, river otter, beaver, red and gray foxes, and raccoon. American alligator are fairly common.

### 3.4 Threatened and Endangered Species

*Interior Least Tern.* Interior populations of the least tern, formerly well-distributed in the Mississippi Basin, now survive only in scattered remnants. Least tern habitat has been decimated by extensive water management projects and increased public use of beaches and sandbars. The species is listed by the Service as endangered, with the following caveats: Louisiana, Mississippi River, and tributaries north of Baton Rouge; Mississippi, Mississippi River only; and Texas, everywhere except the Texas coast and a 50-mile zone inland from the coast. Recorded interior least tern nesting locations occur on the Red River from Arkansas south to Natchitoches. Throughout the reach, the tern nests in shallow, inconspicuous depressions in open areas on sandbars and sand islands. These nests are subject to detrimental effects from a variety of predatory and nonpredatory impacts. Nonpredatory impacts include human recreational activity, most notably all-terrain vehicles or other off-road vehicles, livestock foraging, and naturally occurring hydrologic conditions.

### 3.5 Fishery Resources

Red River NWR provides habitat for many species of freshwater fish (Appendix I). Important game species found in refuge waters include: bluegill (*Lepomis macrochirus*); redear sunfish (*Lepomis microlophus*); longear sunfish (*Lepomis megalotis*); white crappie (*Pomoxis annularis*); black crappie (*Pomoxis nigromaculatus*); largemouth bass (*Micropterus salmoides*); yellow bass (*Morone mississippiensis*); and white bass (*Morone chrysops*). Other species include: blue catfish (*Ictalurus furcatus*); flathead catfish (*Pylodictus olivaris*); channel catfish (*Ictalurus punctatus*); smallmouth buffalo (*Ictiobus bubalus*); bigmouth buffalo (*Ictiobus cyprinellus*); black buffalo (*Ictiobus niger*); freshwater drum (*Aplodinotus grunniens*); longnose gar (*Lepisosteus osseus*); shortnose gar (*Lepisosteus platostomus*); alligator gar (*Lepisosteus spatula*); spotted gar (*Lepisosteus oculatus*); bowfin (*Ambloplites calva*); and carp (*Cyprinus carpio*).

### 3.6 Cultural Resources

Section 106 of the National Historic Preservation Act provides the framework for federal review and consideration of cultural resources during federal project planning and execution. The implementing regulations for the Section 106 process (36 CFR Part 800) have been promulgated by the Advisory Council on Historic Preservation. The Secretary of the Interior maintains the National Register of Historic Places (NRHP) and sets forth significance criteria (36 CFR Part 60) for inclusion in the register. Cultural resources may be considered "historic properties" for the purpose of consideration by a federal undertaking if they meet NRHP criteria. The implementing regulations at 36 CFR 800.16(v) define an undertaking as "a project, activity, or program funded in whole or in part under the direct or indirect jurisdiction of a Federal agency, including those carried out by or on behalf of a Federal agency; those carried out with Federal financial assistance; those requiring a Federal permit, license or approval; and those subject to state or local regulation administered pursuant to a delegation or approval by a Federal

agency." Historic properties are those that are formally placed in the NRHP by the Secretary of the Interior, and those that meet the criteria and are determined eligible for inclusion. Like all federal agencies, the Service must abide by Section 106 of the National Historic Preservation Act. Cultural resources management in the Service is the responsibility of the Regional Director and is not delegated for the Section 106 process when historic properties could be affected by Service undertakings, for issuing archaeological permits, and for Indian tribal involvement. The Service's Regional Historic Preservation Officer (RHPO) advises the Regional Director about procedures, compliance, and implementation of the several cultural resources laws. The refuge manager assists the RHPO by informing the RHPO (early in the process) about Service undertakings, by protecting archaeological sites and historic properties on Service-managed and administered lands, by monitoring archaeological investigations by contractors and permittees, and by reporting violations.

Red River NWR follows these procedures to protect the public's interest in preserving any cultural legacy that may potentially occur on the refuge. Whenever construction work is undertaken that involves any excavation with heavy earth-moving equipment, such as tractors, graders, and bulldozers, the refuge contracts with a qualified archaeologist or cultural resources expert to conduct an archaeological survey of the subject property. The results of this survey are submitted to the RHPO as well as to the Louisiana State Historic Preservation Officer (SHPO). The SHPO reviews the surveys and determines whether cultural resources will be impacted, that is, whether any properties listed in or eligible for listing in the NRHP will be affected. If cultural resources are actually encountered during construction activities, the refuge is to notify the SHPO immediately.

### **3.7 Socio Economic**

The refuge is divided into five separate refuge units spread over 120 miles of the Red River Valley from the Arkansas/Louisiana state line to near Alexandria, Louisiana. The refuge units are located in parts of Caddo, Bossier, DeSoto, Red River, and Natchitoches parishes, Louisiana. The Red River Valley in Louisiana felt the pressure of European colonization at an early stage. Continued agricultural development throughout the 1800s and early 1900s caused almost all the historic bottomland hardwood forests to be cleared. The valley is now one of the most environmentally degraded floodplains in the state. Four of the refuge units are in a rural setting; the fifth unit is located in the major metropolitan areas of Shreveport and Bossier City. Table 1 provides an overview of the demographics of the five parishes that contain portions of the refuge.



**Table 1. Demographics of Bossier, Caddo, DeSoto, Natchitoches, and Red River Parishes, Louisiana, based on U.S. Census 2000 data.**

| <i>Parish</i> | <i>Population</i> | <i>Households</i> | <i>Percent Caucasian</i> | <i>Popu. Density (indiv./sq.mi.)</i> | <i>Median Annual Household Income (\$)</i> |
|---------------|-------------------|-------------------|--------------------------|--------------------------------------|--|
| Bossier       | 105,541           | 36,628            | 75.2                     | 117.1                                | 40,581                                     |
| Caddo         | 251,309           | 97,974            | 51.6                     | 285.9                                | 32,575                                     |
| DeSoto        | 26,383            | 9,691             | 58.4                     | 29.1                                 | 29,803                                     |
| Natchitoches  | 38,541            | 14,263            | 57.8                     | 31.1                                 | 27,272                                     |
| Red River     | 9,622             | 3414              | 57.9                     | 24.7                                 | 23,153                                     |

Data provided by the latest National Survey of Fishing, Hunting, and Wildlife-associated Recreation (USDI et al. 2003) show that for the year 2001, a total of 1.6 million people participated in fishing, hunting, and wildlife-watching activities in Louisiana. These activities resulted in roughly \$1.6 billion in expenditures, with the majority spent on equipment (58 percent) and trip-related (36 percent) expenses. Of these totals, approximately 970,000 enthusiasts participated in fishing and 12.1 million fishing trips were made. The total expenditures for fishing were \$703 million, with 57 percent trip-related, 39 percent for equipment, and 5 percent for other expenses. A total of 333,000 enthusiasts participated in hunting and 6.3 million hunting trips were made. Total hunting expenditures were \$446 million, with 61 percent spent on equipment, 27 percent trip-related, and 12 percent for other expenses. A total of 935,000 enthusiasts participated in wildlife watching and 2.4 million trips were made. Total expenditures for wildlife watching were \$168 million, with 58 percent spent on equipment, 33 percent trip-related, and 9 percent for other expenses.

## **Chapter 4      Environmental Consequences**

This chapter describes the foreseeable environmental consequences of implementing the two management alternatives in Chapter 2. When detailed information is available, a scientific and analytic comparison between alternatives and their anticipated consequences is presented, which is described as "impacts" or "effects." When detailed information is not available, those comparisons are based on the professional judgment and experience of refuge staff and Service and State biologists.

### **4.1 Effects Common to all Alternatives**

#### **4.1.1 Environmental Justice**

Executive Order 12898 "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations" was signed by President Bill Clinton on February 11, 1994, to focus federal attention on the environmental and human health conditions of minority and low-income populations with the goal of achieving environmental protection for all communities. The Order directed federal agencies to develop environmental justice strategies to aid in identifying and addressing disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority and low-income populations. The Order is also intended to promote nondiscrimination in federal programs substantially affecting human health and the environment, and to provide minority and low-income communities access to public information and participation in matters relating to human health or the environment. This assessment has not identified any adverse or beneficial effects for either alternative unique to minority or low-income populations in the affected area. Neither alternative will disproportionately place any adverse environmental, economic, social, nor health impacts on minority or low-income populations.

#### **4.1.2 Public Health and Safety**

Each alternative would have similar effects or minimal to negligible effects on human health and safety.

#### **4.1.3 Refuge Physical Environment**

Impacts of each alternative on the refuge physical environment would have similar minimal to negligible effects. Some disturbance to surface soils, topography, and vegetation would occur in areas selected for hunting; however effects would be minimal. Hunting would benefit vegetation as it is used to keep many resident wildlife populations in balance with the habitat's carrying capacity. The refuge would also control access to minimize habitat degradation.

Impacts to the natural hydrology would have negligible effects. The refuge expects impacts to air and water quality to be minimal and only due to refuge visitors' automobile and off-road vehicle emissions and run-off from road and trail sides. The effect of these refuge-related activities on overall air and water quality in the region are anticipated to be

relatively negligible. Existing State water quality criteria and use classifications are adequate to achieve desired on-refuge conditions; thus, implementation of the proposed action would not impact adjacent landowners or users beyond the constraints already implemented under existing State standards and laws.

Impacts associated with solitude are expected to be minimal given time and space zone management techniques, such as seasonal access and area closures, used to avoid conflicts among user groups.

#### **4.1.4. Cultural Resources**

Under each alternative, hunting, regardless of method or species targeted, is a consumptive activity that does not pose any threat to historic properties on and/or near the Refuge.

#### **4.1.5. Facilities**

Maintenance or improvement of existing facilities (i.e. parking areas, roads, trails, and boat ramps) will cause minimal short term impacts to localized soils and waters and may cause some wildlife disturbances and damage to vegetation.

### **4.2 Summary of Effects**

#### **4.2.1 Impacts to Habitat**

##### *No Action Alternative*

Under this alternative, additional acreage would not be opened to hunting. The increase of native and exotic wildlife would have negative impacts on refuge habitats. Overpopulation of wildlife leads to habitat degradation and modification. In turn, this would negatively impact future resident and migratory wildlife populations, as well management actions on the refuge.

##### *Proposed Action Alternative*

The biological integrity of the refuge would be protected under this alternative, and the refuge purpose of conserving wetlands for wildlife would be achieved. The hunting of hogs, beavers and deer would positively impact wildlife habitat by promoting plant health and diversity, reducing hog wallowing which destroys vegetation and compacts soils, and increasing tree seedling survival. Hunting of beavers would decrease their populations and in effect, increase the health of forested wetlands.

The additional acreage would be utilized more by the public (hunters) than previously which might cause increased trampling of vegetation. Impacts to vegetation should be minor. Hunter density is estimated to be an average of 1 hunter/1,000 acres throughout the hunting season. Refuge-regulations would not permit the use of ATVs off of designated trails. Vehicles would be confined to existing roads and parking lots.

#### **4.2.2 Impacts to Hunted Wildlife**

##### *No Action Alternative*

Additional mortality of individual hunted animals would not occur under this alternative. Disturbance by hunters to hunted wildlife would not occur; however, other public uses that cause disturbance, such as wildlife observation and photography, would still be permitted.

Deer, hog, beaver, coyote, raccoon and opossum populations could increase above the habitat's carrying capacity in the area not opened to hunting. The likelihood of starvation and diseases, such as bluetongue and EHD in deer and distemper and rabies in raccoon and opossum, would increase as would vehicle-deer collisions. Feral hogs can harbor several infectious diseases, some of which can be fatal to wildlife. Additionally, feral hogs compete directly for food with deer, bears, turkeys, squirrels and many other birds and mammals.

##### *Proposed Action Alternative*

Additional mortality of individual hunted animals would occur under this alternative, estimated by the refuge to be a maximum of 100 deer, 2,000 ducks, 200 snow geese, and 200 white-fronted geese annually. Estimates for other hunted species (raccoon, opossum, quail, squirrel, rabbit, dove, hog) would be less than 100 individuals per species. Hunting causes some disturbance to not only the species being hunted but other game species as well. However, time and space zoning established by refuge regulations would minimize incidental disturbance.

Hunting of deer, hog, beaver, coyote, raccoon and opossum would help maintain their populations at or below carrying-capacity. The likelihood of starvation and diseases, such as bluetongue and EHD in deer and distemper and rabies in raccoon and opossum, would be decreased as would deer-vehicle collisions. Reduction of the hog population would decrease risk of transmitting fatal diseases by hogs to other wildlife species. Fewer hogs would decrease competition for food with native wildlife, such as deer, turkey, and squirrel.

#### **4.2.3 Impacts to Non-hunted Wildlife**

##### *No Action Alternative*

Ground and shrub nesting birds and turtles are subject to high egg depredation rates if raccoon, coyotes, and opossum populations are not kept in check through harvest. In North Louisiana, research conducted on one population of alligator snapping turtles has shown that raccoons are responsible for depredating 93% of turtle nests (USFWS 2002). Under this alternative, feral hog populations would increase. Non-native hogs are predators of small mammals and deer fawns as well as ground-nesting birds such as turkeys.

Increased disturbance to non-hunted wildlife would not occur in areas closed; however, non-consumptive users would still be permitted to access this land, which might cause disturbance to wildlife.

#### *Proposed Action Alternative*

Populations of raccoon, coyotes, and opossum would be decreased through hunting under this alternative. Depredation rates of songbirds, turkeys, turtles and their nests would decrease. Feral hog populations would be reduced thereby decreasing predation of deer fawns, turkeys and small mammals.

Disturbance to non-hunted wildlife would increase slightly. However, significant disturbance would be unlikely for the following reasons. Small mammals, including bats, are inactive during winter when hunting season occurs. These species are also nocturnal. Both of these qualities make hunter interactions with small mammals very rare. Hibernation or torpor by cold-blood reptiles and amphibians also limits their activity during the hunting season when temperatures are low. Hunters would rarely encounter reptiles and amphibians during most of the hunting season. Invertebrates are also not active during cold weather and would have few interactions with hunters during the hunting season. The refuge has estimated current hunter density on peak days to be no more than 1 hunter per 160 acres. During the vast majority of the hunting season, hunter density is much lower (1 hunter/1,000 acres). Refuge regulations further mitigate possible disturbance by hunters to non-hunted wildlife. Vehicles are restricted to roads and the harassment or taking of any wildlife other than the game species legal for the season is not permitted. Disturbance to the daily wintering activities, such as feeding and resting, of birds might occur, but would be transitory as hunters traverse habitat. Disturbance to birds by hunters would probably be commensurate with that caused by non-consumptive users.

#### **4.2.4 Impacts to Endangered and Threatened Species**

##### *No Action Alternative*

Because current public use levels on the refuge would remain the same, there would be no increased chance of adversely affecting threatened and endangered species.

##### *Proposed Action Alternative*

A potential disadvantage of this alternative is its effect on threatened and endangered species on the refuge such as the interior least tern. However, a Section 7 Evaluation associated with this assessment was conducted, and it was determined that the proposed action is not likely to adversely affect these species (Refer to 2008 Section 7 Evaluation for Sport Hunting on Red River NWR).



#### **4.2.5 Impacts to Refuge Facilities (roads, trails, parking lots, levees)**

##### *No Action Alternative*

Additional damage to roads and ATV trails due to hunter use during wet weather periods would not occur; however, other users would still be using roads, thereby necessitating periodic maintenance. Additionally, costs associated with an expanded hunting program in the form of road and levee maintenance, instructional sign needs, and law enforcement would not be applicable.

##### *Proposed Action Alternative*

Additional damage to roads and ATV trails due to hunter use during wet weather periods might occur. The current refuge hunt program on 2,500 acres for the past few years has shown these impacts to be minimal. There would be some costs associated with a hunting program in the form of road and ATV trail maintenance, instructional sign needs, and law enforcement. These costs should be minimal relative to total refuge operations and maintenance costs and would not diminish resources dedicated to other refuge management programs.

#### **4.2.6 Impacts to Wildlife Dependant Recreation**

##### *No Action Alternative*

The public would not have the additional opportunity to harvest a renewable resource, participate in wildlife-oriented recreation that is compatible with the purposes for which the refuge was established, have an increased awareness of Red River NWR and the National Wildlife Refuge System; nor would the Service be meeting public use demand.

##### *Proposed Action Alternative*

As public use levels expand across time, unanticipated conflicts between user groups may occur. Experience has proven that time and space zoning (e.g., establishment of separate use areas, use periods, and restrictions on the number of users) is an effective tool in eliminating conflicts between user groups. Squirrel and rabbit hunters would not be able to use dogs until after the last deer gun hunt to ensure conflicts do not arise. Raccoon and opossum hunting (which the State allows to be open all year) would be limited to the squirrel and rabbit season during daylight hours and limited to January and December at nighttime. This would limit conflicts between raccoon/opossum hunters and deer gun hunters. This would also limit disturbance to wildlife during the spring and summer when most species reproduce. Conflicts between hunters and non-consumptive users might occur but would be mitigated by time (non-hunting season) and space zoning. The refuge would focus non-consumptive use (mainly birdwatching and other wildlife viewing) on areas that are closed to hunting.

The public would be allowed to increase the harvest of a renewable resource, and the refuge would be promoting a wildlife-oriented recreational opportunity that is compatible with the purpose for which the refuge was established. The public would have an

increased awareness of Red River NWR and the National Wildlife Refuge System and public demand for more hunting would be met. The public would also have the opportunity to harvest a renewable resource in a traditional manner, which is culturally important to the local community. This alternative would also allow the public to enjoy hunting at no or little cost in a region where private land is leased for hunting, often costing a person \$300-\$2000/year for membership. This alternative would allow youth the opportunity to experience a wildlife-dependant recreation, instill an appreciation for and understanding of wildlife, the natural world and the environment and promote a land ethic and environmental awareness.

### **4.3 Cumulative Impacts Analysis**

#### **4.3.1 Anticipated Direct and Indirect Impacts of Proposed Action on Wildlife Species.**

##### **4.3.1.1 Migratory Birds**

The U.S. Fish and Wildlife Service, working with partners, annually prescribe frameworks, or outer limits, for dates and times when hunting may occur and the number of birds that may be taken and possessed. These frameworks are necessary to allow State selections of season and limits for recreation and sustenance; aid Federal, State, and tribal governments in the management of migratory game birds; and permit harvests at levels compatible with population status and habitat conditions. Because the Migratory Bird Treaty Act stipulates that all hunting seasons for migratory game birds are closed unless specifically opened by the Secretary of the Interior, the Service annually promulgates regulations (50 CFR Part 20) establishing the frameworks from which States may select season dates, bag limits, shooting hours, and other options for the each migratory bird hunting season. The frameworks are essentially permissive in that hunting of migratory birds would not be permitted without them. Thus, in effect, Federal annual regulations both allow and limit the hunting of migratory birds.

Migratory game birds are those bird species so designated in conventions between the United States and several foreign nations for the protection and management of these birds. Under the Migratory Bird Treaty Act (16 U.S.C. 703-712), the Secretary of the Interior is authorized to determine when "hunting, taking, capture, killing, possession, sale, purchase, shipment, transportation, carriage, or export of any ... bird, or any part, nest, or egg" of migratory game birds can take place, and to adopt regulations for this purpose. These regulations are written after giving due regard to "the zones of temperature and to the distribution, abundance, economic value, breeding habits, and times and lines of migratory flight of such birds, and are updated annually (16 U.S.C. 704(a)). This responsibility has been delegated to the U.S. Fish and Wildlife Service as the lead federal agency for managing and conserving migratory birds in the United States. Acknowledging regional differences in hunting conditions, the Service has administratively divided the nation into four Flyways for the primary purpose of managing migratory game birds. Each Flyway (Atlantic, Mississippi, Central, and Pacific) has a Flyway Council, a formal organization generally composed of one member from each State and Province in that Flyway. Red River NWR is within the Mississippi Flyway.

The process for adopting migratory game bird hunting regulations, located in 50 CFR part 20, is constrained by three primary factors. Legal and administrative considerations dictate how long the rule making process will last. Most importantly, however, the biological cycle of migratory game birds controls the timing of data-gathering activities and thus the dates on which these results are available for consideration and deliberation. The process of adopting migratory game bird hunting regulations includes two separate regulations-development schedules, based on "early" and "late" hunting season regulations. Early hunting seasons pertain to all migratory game bird species in Alaska, Hawaii, Puerto Rico, and the Virgin Islands; migratory game birds other than waterfowl (e.g. dove, woodcock, etc.); and special early waterfowl seasons, such as teal or resident Canada geese. Early hunting seasons generally begin prior to October 1. Late hunting seasons generally start on or after October 1 and include most waterfowl seasons not already established. There are basically no differences in the processes for establishing either early or late hunting seasons. For each cycle, Service biologists and others gather, analyze, and interpret biological survey data and provide this information to all those involved in the process through a series of published status reports and presentations to Flyway Councils and other interested parties (USFWS 2006).

Currently, Red River NWR has an average harvest of 500 ducks (primarily Mallards, Wood Ducks, Gadwalls, Green-winged Teal), snow geese, and white-fronted geese on 2,500 acres per season. Under the proposed action, Red River NWR estimates a maximum additional 2,000 ducks, 200 snow geese, and 200 white-fronted geese would be harvested each year. Waterfowl hunting is only allowed until noon each day during the season, which is more restrictive than regulations set forth by Louisiana Department of Wildlife and Fisheries (LDWF). This harvest impact represents 0.2%, 0.3%, and 0.3%, respectively of Louisiana's four-year average harvest of 921,990 ducks, 60,830 snow geese, and 72,611 white-fronted geese (USFWS 2005). Expansion of waterfowl hunting should not have cumulative impacts on waterfowl populations.

Because the Service is required to take abundance of migratory birds and other factors in to consideration, the Service undertakes a number of surveys throughout the year in conjunction with the Canadian Wildlife Service, State and Provincial wildlife-management agencies, and others. To determine the appropriate frameworks for each species, the Service considers factors such as population size and trend, geographical distribution, annual breeding effort, the condition of breeding and wintering habitat, the number of hunters, and the anticipated harvest. After frameworks are established for season lengths, bag limits, and areas for migratory game bird hunting, migratory game bird management becomes a cooperative effort of State and Federal Governments. After Service establishment of final frameworks for hunting seasons, the States may select season dates, bag limits, and other regulatory options for the hunting seasons. States may always be more conservative in their selections than the Federal frameworks but never more liberal. Season dates and bag limits for National Wildlife Refuges open to hunting are never longer or larger than the State regulations. In fact, based upon the findings of an environmental assessment developed when a National Wildlife Refuge opens a new hunting activity, season dates and bag limits may be more restrictive than the State allows. At Red River NWR, season length is more restrictive for waterfowl and doves than the State allows.



NEPA considerations by the Service for hunted migratory game bird species are addressed by the programmatic document, "Final Supplemental Environmental Impact Statement: Issuance of Annual Regulations Permitting the Sport Hunting of Migratory Birds (FSES 88-14)," filed with the Environmental Protection Agency on June 9, 1988. We published Notice of Availability in the Federal Register on June 16, 1988 (53 FR 22582), and our Record of Decision on August 18, 1988 (53 FR 31341). Annual NEPA considerations for waterfowl hunting frameworks are covered under a separate Environmental Assessment, "Duck Hunting Regulations for 2006-07," and an August 24, 2006, Finding of No Significant Impact. Further, in a notice published in the September 8, 2005, Federal Register (70 FR 53376), the Service announced its intent to develop a new Supplemental Environmental Impact Statement for the migratory bird hunting program. Public scoping meetings were held in the spring of 2006, as announced in a March 9, 2006, Federal Register notice (71 FR 12216). More information may be obtained from: Chief, Division of Migratory Bird Management, U.S. Fish and Wildlife Service, Department of the Interior, MS MBSP-4107-ARLSQ, 1849 C Street, NWR, Washington, DC 20240.

Although woodcock are showing declines in numbers on their breeding grounds, habitat loss is considered to be the culprit, not hunting. This assertion was tested in a study conducted by the U.S. Geological Patuxent Wildlife Research Center in 2005 (McAuley *et al.* 2005). Results showed no significant differences in woodcock survival between hunted and non-hunted areas. Furthermore, the authors concluded that hunting was not having a considerable impact on woodcock numbers in the Northeast (McAuley *et al.* 2005).

An estimated 24,000 woodcock were harvested in the 2005/06 season in the state of Louisiana. Louisiana's harvest of 24,000 woodcock represented 0.5% of the estimated 4.6 million North American woodcock population. Limited woodcock habitat exists during most of the hunting season because back water flooding inundates the refuge. During extremely dry years, when more woodcock habitat becomes available, they may experience higher harvest rates. With such relatively few woodcock being currently harvested on the refuge, the opening of additional acreage to hunting as stated in the proposed action should have no cumulative effects on their local, regional or flyway populations.

#### 4.3.1.2 Resident Big Game

##### 4.3.1.2.1 Deer

Deer hunting does not have regional population impacts due to restricted home ranges. The average home range of a male deer in Mississippi is  $1,511 \pm 571$  S.D hectares. (Mott *et al.* 1985). Therefore, only local impacts occur. Harvest and survey data confirm that decades of deer hunting on surrounding private lands (using bait and a longer season) have not had a local cumulative adverse effect on the deer population. I.D.W.F estimate 209,200 deer were harvested throughout the state in 2005/06. The average annual statewide harvest since 1995 is 234,000 deer. The refuge estimates an additional maximum 100 deer would be harvested under the proposed action, representing only

0.04% of the long-term average state harvest. Expansion of hunting on refuge lands for a very limited deer gun hunt (without bait) should not have cumulative impacts on the deer herd.

#### 4.3.1.2.2 Feral Hogs

Feral hogs are an invasive introduced, non-native species and is not considered a game species by the State of Louisiana. No bag limits are established for feral hogs. Hunting of feral hogs provides the refuge with another management tool in reducing this detrimental species, and at the same time, is widely enjoyed by local hunters. Cumulative effects to an exotic, invasive species should not be of concern because the refuge would like to extirpate this species on refuge lands. Hunting of hogs is not considered detrimental to the biological integrity of the refuge, is not likely to create conflict with other public uses and is within the wildlife dependant public uses to be given priority consideration. Since hogs are exotic, they are a priority species for refuge management only in terms of their negative impacts on refuge biota and need for eradication. They are a popular game species though, and the public interest would best be served by allowing this activity on the refuge. However, even with hunting, feral hogs are likely to always be present because they are prolific breeders.

#### 4.3.1.2.3 Wild Turkey

Turkeys are non-migratory and therefore hunting only impacts the local population. The hunting area would be confined to a small section of uplands on the western side of the refuge. State biologists with LDWF have trapped and banded turkeys in North Louisiana for the past several years. Data from banding indicate that turkey harvest rates of 15 % for north Louisiana during 2002-06 is well below the scientifically accepted threshold of 30% (Vangilder 1992). LDWF conduct turkey brood surveys each spring. Data indicate that poults per hen ratios average 3.5 over the past 11 years, which is considered "very good" by the Southeast Wild Turkey Technical Committee (Savage 2005). These data indicate that the local turkey population has withstood hunting on surrounding private lands for several years without negative cumulative effects on turkeys. Therefore the turkey hunt should not cumulatively impact the population.

#### 4.3.1.3 Small Game (Squirrel, Rabbit, Raccoon, Opossum, Coyote, Beaver and Quail)

Squirrels, rabbit, raccoon, and opossum cannot be affected regionally by refuge hunting because of their limited home ranges. Only local effects will be discussed. Opossum and raccoon are hunted primarily at night. Raccoon are more sought after than opossum by the public. Hunting helps regulate opossum and raccoon populations; however, unless the popularity of this type of hunting increases, raccoons and opossums numbers will always be higher than desired. When these species become extremely overabundant, diseases such as distemper and rabies reduce the populations. However, waiting for disease outbreak to regulate their numbers can be a human health hazard. Cumulative impacts to raccoon and opossum are unlikely considering they reproduce quickly, are difficult to hunt due to their nocturnal habits, and are not as popular for hunting as other game species.

Studies have been conducted within and outside of Louisiana to determine the effects of hunting on the population dynamics of small game. Results from studies have consistently shown that small game, such as rabbits and squirrels, are not affected by hunting, but rather are limited by food resources. The refuge consulted with biologists at LDWF in association with this assessment on the cumulative impacts of hunting on rabbits and squirrel. The statewide Louisiana harvest for squirrels in 2005/06 was estimated at 1,253,900. LDWF estimated 255,200 rabbits killed by hunters in the 2005/06 season. Under the proposed action, the refuge estimates a maximum additional 50 rabbits and 200 squirrels would be harvested, representing only 0.02% of the statewide harvests. Gray squirrels, fox squirrels, eastern cottontails, and swamp rabbits are prolific breeders and their populations have never been threatened by hunting in Louisiana even prior to the passing of hunting regulations as we know them today.

Quail are non-migratory and therefore are not regionally affected by hunting. Only local effects will be discussed. The early successional habitat that quail favor is not abundant on the refuge; therefore, quail hunting is limited. Studies by the LDWF indicate that a harvest of <30% in the southeast should be sustainable. Past surveys by refuge staff in North Louisiana have found that an average of 1.3 quail were harvested on refuges from 2001-2004. The harvesting of less than 2 quail per year should not have cumulative effects on their local population.

Coyotes and beaver cannot be affected regionally by refuge hunting because of their limited home ranges. Only local effects will be discussed. Coyotes and beaver reproduce rapidly, are overpopulated, and can have adverse effects on their habitats. Coyotes depredate small mammals, songbirds and their nests, turkey and quail nests and any other animal they opportunistically encounter. When coyote numbers are high, local wildlife populations can be negatively affected. Coyotes are probably the most resilient species in North America. Today regulated hunting has no cumulative impact on their populations. Hunting of both coyotes and beaver is beneficial in helping meet refuge objectives.

#### 4.3.1.4 Non-hunted Wildlife

Non-hunted wildlife would include non-hunted migratory birds such as songbirds, wading birds, raptors, and woodpeckers; small mammals such as voles, moles, mice, shrews, and bats; reptiles and amphibians such as snakes, skinks, turtles, lizards, salamanders, frogs and toads; and invertebrates such as butterflies, moths, other insects and spiders. Except for migratory birds and some species of migratory bats, butterflies and moths, these species have very limited home ranges and hunting could not affect their populations regionally; thus, only local effects will be discussed.

Disturbance to non-hunted migratory birds could have regional, local, and flyway effects. Regional and flyway effects would not be applicable to species that do not migrate such as most woodpeckers, and some songbirds including cardinals, titmice, wrens, chickadees, etc. The cumulative effects of disturbance to non-hunted migratory birds under the proposed action are expected to be negligible for the following reasons. Hunting season would not coincide with the nesting season. Long-term future impacts that could occur if reproduction was reduced by hunting are not relevant for this reason.



**Public Review and Comment:**

This compatibility determination was part of the 2008 Integrated Sport Hunting Plan and Environmental Assessment for Red River National Wildlife Refuge and made available for public comment for 14 days, starting November 14, 2008. No comments were received.

**Determination (check one below):**

☐ Use is Not Compatible

☒ Use is Compatible with Following Stipulations

**Stipulations Necessary to Ensure Compatibility:**

Hunting seasons and bag limits are established annually as agreed upon during the annual hunt coordination meeting with state personnel. These generally fall within the state framework. The refuge can, and has, established more restrictive seasons and bag limits to prevent over-harvest of individual species or disturbance to trust species. All hunters are required to possess a refuge hunting permit while participating in refuge hunts. This permit, which augments the state hunting regulations, explains both the general hunt regulations and the refuge-specific regulations. Law enforcement patrols are frequently conducted throughout the hunting season to ensure compliance with refuge laws and regulations.

**Justification:**

White-tailed deer hunting is necessary to keep deer populations at or below the habitat's carrying capacity. Overpopulation of deer causes an increase in disease and starvation. Deer herds that are overpopulated will significantly alter habitats. Feral hogs are invasive exotics that destroy native plant habitats and compete for food with other native species such as deer, turkey, squirrel, and waterfowl. Reduction of the hog population by hunting is beneficial to the biological integrity of the Refuge.

Hunting is a very popular wildlife-dependant use by the public. Hunting provides wildlife-oriented recreation to the public in a region where these opportunities are vanishing. The vast majority of private land is leased for hunting, often costing a person \$300-\$2000/year for membership. The refuge often attracts those hunters who cannot afford to join a hunting club.

**NEPA Compliance for Refuge Use Description: Place an X in appropriate space.**

☐ Categorical Exclusion without Environmental Action Statement

☐ Categorical Exclusion and Environmental Action Statement

☒ Environmental Assessment and Finding of No Significant Impact

☐ Environmental Impact Statement and Record of Decision

**Mandatory 15-Year Re-evaluation Date:** December 31, 2023

**Description of Use:***Small Game Hunting*

Small game hunting consists of squirrels, rabbits, raccoons, opossum, coyotes, beaver, and quail. Hunting activities are permitted with a valid refuge hunt permit and appropriate state licenses. The refuge hunt program is an excellent public relations tool, which provides quality recreational opportunities for the public while promoting national wildlife refuges. The refuge hunt plan was developed to ensure that associated public recreation and wildlife management objectives are met in a responsible and consistent manner.

Hunting, a wildlife-dependent recreation, has been identified in the National Wildlife Refuge System Improvement Act of 1997 as a priority public use provided it is compatible with the purpose for which the refuge was established.

Hunting could occur throughout the refuge. Small game hunting seasons on the refuge follow the state regulated seasons, which usually are from October through February. All hunting seasons are established annually through coordination with the Louisiana Department of Wildlife and Fisheries. All regulations and annual changes are published in the Code of Federal Regulations (50 CFR).

Hunters access the refuge on open roads, by boat, by foot, and by all-terrain vehicles limited to designated trails.

Public hunting opportunities are limited in north Louisiana. Hunting opportunities on private land are virtually non-existent unless a person is willing and able to purchase hunting rights through hunting leases.

**Availability of Resources:***Resources involved in the administration and management of the use:*

Personnel time associated with administration and law enforcement

*Special equipment, facilities, or improvements necessary to support the use:*

Access roads, gates, boat ramps, brochures, kiosks, and law enforcement equipment

Maintenance costs: \$10,000/year

Monitoring costs: \$5,000/year

Offsetting revenues: None

**Anticipated Impacts of the Use:***Short-term impacts:*

National wildlife refuges administered by the North Louisiana Refuges Complex have been open to hunting since 1975, with no documented disturbance to refuge habitats and no noticeable impact on the abundance of species hunted or other associated wildlife. While managed hunting opportunities may result in localized disruption of individual animals' daily routines, no noticeable adverse effect on populations has been documented.



*Long-term impacts:*

To date, there is no indication of adverse biological impacts associated with the Complex's hunting program. However, should it become necessary, the refuge has the latitude to adjust hunting seasons and bag limits annually, or to close the refuge entirely if there are safety issues or other concerns that merit closure. This latitude, coupled with monitoring of wildlife populations and habitat conditions by the Service and the Louisiana Department of Wildlife and Fisheries, will ensure that long-term negative impacts to either wildlife populations and/or habitats on the refuge are unlikely.

Should hunting pressure increase on the refuge, alternatives such as quota hunts, a reduction in the number of days of hunting, or restrictions on that part of the refuge open to hunting can be utilized to limit impacts.

*Cumulative impacts:*

The timing and duration of the refuge's hunting program does not coincide with most other uses of the refuge and would not result in cumulative impacts to refuge resources.

**Public Review and Comment:**

This compatibility determination was part of the 2008 Integrated Sport Hunting Plan and Environmental Assessment for Red River National Wildlife Refuge and made available for public comment for 14 days, starting November 14, 2008. No comments were received.

**Determination (check one below):**

☐ Use is Not Compatible

☒ Use is Compatible with Following Stipulations

**Stipulations Necessary to Ensure Compatibility:**

Hunting seasons and bag limits are established annually as agreed upon during the annual hunt coordination meeting with state personnel. These generally fall within the state framework. The refuge can, and has, established more restrictive seasons and bag limits to prevent over-harvest of individual species or disturbance to trust species. All hunters are required to possess a refuge hunting permit while participating in refuge hunts. This permit, which augments the state hunting regulations, explains both the general hunt regulations and the refuge-specific regulations. Law enforcement patrols are frequently conducted throughout the hunting season to ensure compliance with refuge laws and regulations.

**Justification:**

Regulated hunting does not have an adverse impact on populations of small game. Hunting is a priority public use and offers the public an inexpensive wildlife-dependent recreational opportunity.

**NEPA Compliance for Refuge Use Description: Place an X in appropriate space.**

- ☐ Categorical Exclusion without Environmental Action Statement  
☐ Categorical Exclusion and Environmental Action Statement  
☒ Environmental Assessment and Finding of No Significant Impact  
☐ Environmental Impact Statement and Record of Decision

**Mandatory 15-Year Re-evaluation Date:** December 31, 2023

**Description of Use:**

*Migratory Bird Hunting*

Migratory bird hunting on Red River Refuge consists of ducks, snipe, rails, dove, woodcock, coots, and geese. Hunting activities are permitted with a valid refuge hunt permit and appropriate state licenses. The refuge hunt program is an excellent public relations tool, which provides quality recreational opportunities for the public while promoting national wildlife refuges. The refuge hunt plan was developed to ensure that associated public recreation and wildlife management objectives were being met in a responsible and consistent manner.

Hunting, a wildlife-dependent recreation, has been identified in the National Wildlife Refuge System Improvement Act of 1997 as a priority public use provided it is compatible with the purpose for which the refuge was established.

Hunting could occur throughout the refuge. Migratory bird hunting seasons on the refuge follow the state regulated seasons. All hunting seasons are established annually through coordination with the Louisiana Department of Wildlife and Fisheries. All regulations and annual changes are published in the Code of Federal Regulations (50 CFR). Waterfowl, though, can only be hunted until noon each day on the refuge.

Hunters access the refuge on open roads, by boat, by foot, and by all-terrain vehicles limited to designated trails.

Public hunting opportunities are limited in north Louisiana. Hunting opportunities on private land are virtually non-existent unless a person is willing and able to purchase hunting rights through hunting leases.

**Availability of Resources:**

*Resources involved in the administration and management of the use:*

Personnel time associated with administration and law enforcement

*Special equipment, facilities, or improvements necessary to support the use:*

Access roads, gates, boat ramps, brochures, kiosks, and law enforcement equipment

*Maintenance costs:* \$15,000/year

*Monitoring costs:* \$5,000/year

*Offsetting revenues:* None

**Anticipated Impacts of the Use:**

*Short-term impacts:*

National wildlife refuges administered by the North Louisiana Refuges Complex have been open to hunting since 1975, with no documented disturbance to refuge habitats and no noticeable impact on the abundance of species hunted or other associated wildlife. While managed hunting opportunities may result in localized disruption of individual animals' daily routines, no noticeable adverse effect on populations has been documented.

*Long-term impacts:*

To date, there is no indication of adverse biological impacts associated with the Complex's hunting program. However, should it become necessary, the refuge has the latitude to adjust hunting seasons and bag limits annually, or to close the refuge entirely if there are safety issues or other concerns that merit closure. This latitude, coupled with monitoring of wildlife populations and habitat conditions by the Service and the Louisiana Department of Wildlife and Fisheries, will ensure that long-term negative impacts to either wildlife populations and/or habitats on the refuge are unlikely.

Should hunting pressure increase on the refuge, alternatives such as quota hunts, a reduction in the number of days of hunting, or restrictions on that part of the refuge open to hunting can be utilized to limit impacts.

*Cumulative impacts:*

The timing and duration of the refuge's hunting program does not coincide with most other uses of the refuge and would not result in cumulative impacts to refuge resources.

**Public Review and Comment:**

This compatibility determination was part of the 2008 Integrated Sport Hunting Plan and Environmental Assessment for Red River National Wildlife Refuge and made available for public comment for 14 days, starting November 14, 2008. No comments were received.

**Determination (check one below):**

☐ Use is Not Compatible

☒ Use is Compatible with Following Stipulations

**Stipulations Necessary to Ensure Compatibility:**

Hunting seasons and bag limits are established annually as agreed upon during the annual hunt coordination meeting with state personnel. These generally fall within the state framework. The refuge can, and has, established more restrictive seasons and bag limits to prevent over-harvest of individual species or disturbance to trust species. All hunters are required to possess a refuge

hunting permit while participating in refuge hunts. This permit, which augments the state hunting regulations, explains both the general hunt regulations and the refuge-specific regulations. Law enforcement patrols are frequently conducted throughout the hunting season to ensure compliance with refuge laws and regulations. The refuge has included a Refuge Operating Needs System project for a full-time officer to ensure compatibility over the long term.

**Justification:**

Regulated hunting does not have an adverse impact on populations of migratory birds. Hunting is a priority public use and offers the public an inexpensive wildlife-dependent recreational opportunity. Hunting provides wildlife-oriented recreation to the public in a region where these opportunities are vanishing. The vast majority of private land is leased for migratory bird hunting, often costing a person \$2,000-\$10,000/year for membership. The refuge often attracts those hunters who cannot afford to join a hunting club.

**NEPA Compliance for Refuge Use Description: Place an X in appropriate space.**

- ☐ Categorical Exclusion without Environmental Action Statement  
☐ Categorical Exclusion and Environmental Action Statement  
☒ Environmental Assessment and Finding of No Significant Impact  
☐ Environmental Impact Statement and Record of Decision

**Mandatory 15-Year Re-evaluation Date:** December 31, 2023

**Approval of Compatibility Determinations**

The signature of approval is for all compatibility determinations considered within the Sport Hunting Plan for Red River NWR. If one of the descriptive uses is considered for compatibility outside of the plan, the approval signature becomes part of that determination.

**Refuge Manager:**

Pat Stinson 12/10/08  
(Signature/Date)

**Regional Compatibility  
Coordinator:**

Ramela Horton 12/20/08  
(Signature/Date)

**Refuge Supervisor:**

Richard P. Ingram 1/6/09  
(Signature/Date)

**Regional Chief, National  
Wildlife Refuge System,  
Southeast Region**

[Signature] 1/06/09  
(Signature/Date)

Sport Hunting  
Decision Document Package  
for  
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**Contents**

5. Intra-service Section 7 Evaluation

UNITED STATES FISH AND WILDLIFE SERVICE

ENVIRONMENTAL ACTION STATEMENT

Within the spirit and intent of the Council on Environmental Quality's regulations for implementing the National Environmental Policy Act (NEPA), and other statutes, orders, and policies that protect fish and wildlife resources, I have established the following administrative record and determined that the proposed Hunting Plan for Red River National Wildlife Refuge in Red River, Bossier, Natchitoches and DeSoto Parishes, Louisiana:

Check One:

- \_\_\_\_\_ is a categorical exclusion as provided by 516 DM 2, Appendix 1 and 516 DM 6, Appendix 1, Section 1.4 A (4). No further NEPA documentation will therefore be made.
- X   is found not to have significant environmental effects as determined by the attached Environmental Assessment and Finding of No Significant Impact.
- \_\_\_\_\_ is found to have significant effects and, therefore, further consideration of this action will require a notice of intent to be published in the Federal Register announcing the decision to prepare an EIS.
- \_\_\_\_\_ is not approved because of unacceptable environmental damage, or violation of Fish and Wildlife Service mandates, policy, regulations, or procedures.
- \_\_\_\_\_ is an emergency action within the context of 40 CFR 1 506.1 1. Only those actions necessary to control the immediate impacts of the emergency will be taken. Other related actions remain subject to NEPA review.

Other Supporting Documents:

Endangered Species Act, Section 7 Consultation, 2008  
Compatibility Determination, 2008

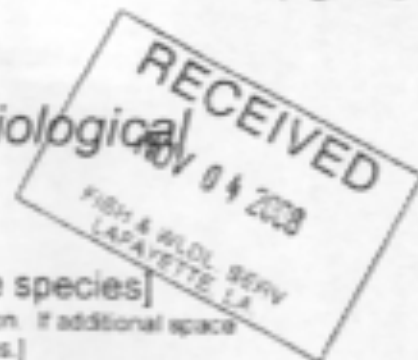
Signature Approval:

Pat A. Ste... \_\_\_\_\_ gms \_\_\_\_\_ 1/14/09  
(1) Originator Date (2) Regional Environmental Coordinator Date

Acting [Signature] 01/14/09 [Signature] 1/15/09  
(3) Regional Chief, NWRS, Southeast Region Date (4) Regional Director, Southeast Region Date



# Appendix G. Intra-Service Section 7 Biological Evaluation



[Federally endangered, threatened, and candidate species]

[Note: This form provides the outline of information needed for intra-Service consultation. If additional space is needed, attach additional sheets, or set up this form to accommodate your responses.]

Originating Person: Pat Stinson

Telephone Number: 318-742-1219 E-Mail: [\\_pat\\_stinson@fws.gov](mailto:_pat_stinson@fws.gov)

Date: October 31, 2008

PROJECT NAME (Grant Title/Number): Red River NWR Proposed Visitor Center and extension of the Arthur Ray Teague Parkway (Project # PLH-RDR 10(1))

I. Service Program:

- ☐ Ecological Services
- ☐ Federal Aid
  - ☐ Clean Vessel Act
  - ☐ Coastal Wetlands
  - ☐ Endangered Species Section 6
  - ☐ Partners for Fish and Wildlife
  - ☐ Sport Fish Restoration
  - ☐ Wildlife Restoration
- ☐ Fisheries
- ☒ Refuges/Wildlife

II. State/Agency: Louisiana/USFWS

III. Station Name: Red River NWR

IV. Description of Proposed Action (attach additional pages as needed):  
Implement 2008 Sport Hunting Plan which would add turkey, dove, gallinules, rails, and snipe hunting and expand the hunting to the entire refuge.

V. Pertinent Species and Habitat:

A. Include species/habitat occurrence map: See Figure 1.

Interior Least Terns: River frontage is owned within the Headquarters, Bayou Pierre, and Lower Cane River Units. If land were acquired in the Wardview Unit, river frontage might be owned there. Records of nesting least terns are known for sandbars adjacent to the Headquarters Unit and near the Bayou Pierre Unit prior to refuge establishment. Since 2000, neither colony has been present due to sandbars being colonized by willow trees. The Wardview Unit has an active colony across the river from what could one day be refuge lands. No nesting records occur anywhere near the Lower Cane River Unit.

B. Complete the following table:

**Table 1. Listed/proposed species/critical habitat that occur or may occur within the project area:**

| SPECIES/CRITICAL HABITAT | STATUS <sup>1</sup> |
|--------------------------|---------------------|
| Interior Least Tern      | E                   |

<sup>1</sup>STATUS: E=endangered, T=threatened, PE=proposed endangered, PT=proposed threatened, CH=critical habitat, PCH=proposed critical habitat, C=candidate species

VI. Location (attach map):

- A. **Ecoregion Number and Name:** West Gulf Coastal Plain
- B. **County and State:** Red River, Bossier, DeSoto and Natchitoches Parishes, Louisiana
- C. **Section, township, and range (or latitude and longitude):** See Figure 1.
- D. **Distance (miles) and direction to nearest town:** The Bayou Pierre Unit is approximately 15 miles north of Coushatta, LA. The Spanish Lake Lowlands Unit is 10 miles north of Natchitoches, LA. The Headquarters Unit is located in Bossier City, LA.
- E. **Species/habitat occurrence:**
- Interior Least Tern (*Sterna antillarum anthalassos*) – known to occur in Caddo, Bossier and Red River Parishes. Breeds on sand or gravel bars of the Upper Red River.

VII. Determination of Effects:

- A. Explanation of effects of the action on species and critical habitats in item V. B (attach additional pages as needed):

**Table 2. Project impacts to listed/proposed species/critical habitat.**

| SPECIES/<br>CRITICAL HABITAT | IMPACTS TO SPECIES/CRITICAL HABITAT  |
|------------------------------|--|
| Interior Least Tern          | Beneficial impacts from working with Interior Least Tern Working Group and potentially assisting state of Louisiana in protecting and restoring interior least tern nesting habitat in the future. |

B. Explanation of actions to be implemented to reduce adverse effects:

Table 3. Conservation measures proposed to minimize or eliminate adverse impacts to proposed/listed species, critical habitat.

| SPECIES/<br>CRITICAL HABITAT | ACTIONS TO MINIMIZE IMPACTS |
|------------------------------|-----------------------------|
| Interior Least Tern          | See below                   |

Interior least terns are found in Caddo, Bossier, and Red River Parishes on the upper portions of the Red River. Red River frontage occurs within the Headquarters, Bayou Pierre and Lower Cane River Units; however, the refuge does not currently own any suitable sandbars for nesting terns. However, if in the future any sandbars are developed within the refuge boundary, then they will be monitored for least tern activity and any necessary posting or closures will be conducted. Hunting will not coincide with the breeding season of interior least terns; therefore, the 2008 Sport Hunting Plan would have no effect on least terns.

VIII. Effect Determination and Response Requested:

Table 4. The effect determination and response requested for impacts to each proposed/listed species/critical habitat.

| SPECIES/<br>CRITICAL HABITAT | DETERMINATION <sup>1</sup> |    |    | RESPONSE <sup>1</sup><br>REQUESTED |
|------------------------------|----------------------------|----|----|------------------------------------|
|                              | NE                         | NA | AA |                                    |
| Interior Least Tern          | X                          |    |    | Concurrence                        |

DETERMINATION/RESPONSE REQUESTED:

NE = no effect. This determination is appropriate when the proposed action will not directly, indirectly, or cumulatively impact, either positively or negatively, any listed, proposed, candidate species or designated/proposed critical habitat. Response Requested is optional but a "Concurrence" is recommended for a complete Administrative Record.

NA = not likely to adversely affect. This determination is appropriate when the proposed action is not likely to adversely impact any listed, proposed, candidate species or designated/proposed critical habitat or there may be beneficial effects to these resources. Response Requested is a "Concurrence".

AA = likely to adversely affect. This determination is appropriate when the proposed action is likely to adversely impact any listed, proposed, candidate species or designated/proposed critical habitat. Response Requested for listed species is "Formal Consultation". Response Requested for proposed or candidate species is

"Concurrence".

  
Signature (originating station)

10/31/08  
date

Refuge Manager  
Title

*If the project description changes or incidental take exceeds that which has been exempted under section 9 of the Act, then the Ecological Services Field Office must be contacted.*

IX. Reviewing Ecological Services Office Evaluation:

A. Concurrence ☒ Non-concurrence ☐

B. Formal consultation required ☐

C. Conference required ☐

D. Informal conference required ☐

E. Remarks (attach additional pages as needed):

  
Signature

Nov 7, 2008  
Date

Deputy Supervisor  
Title/Office

Lafayette ES

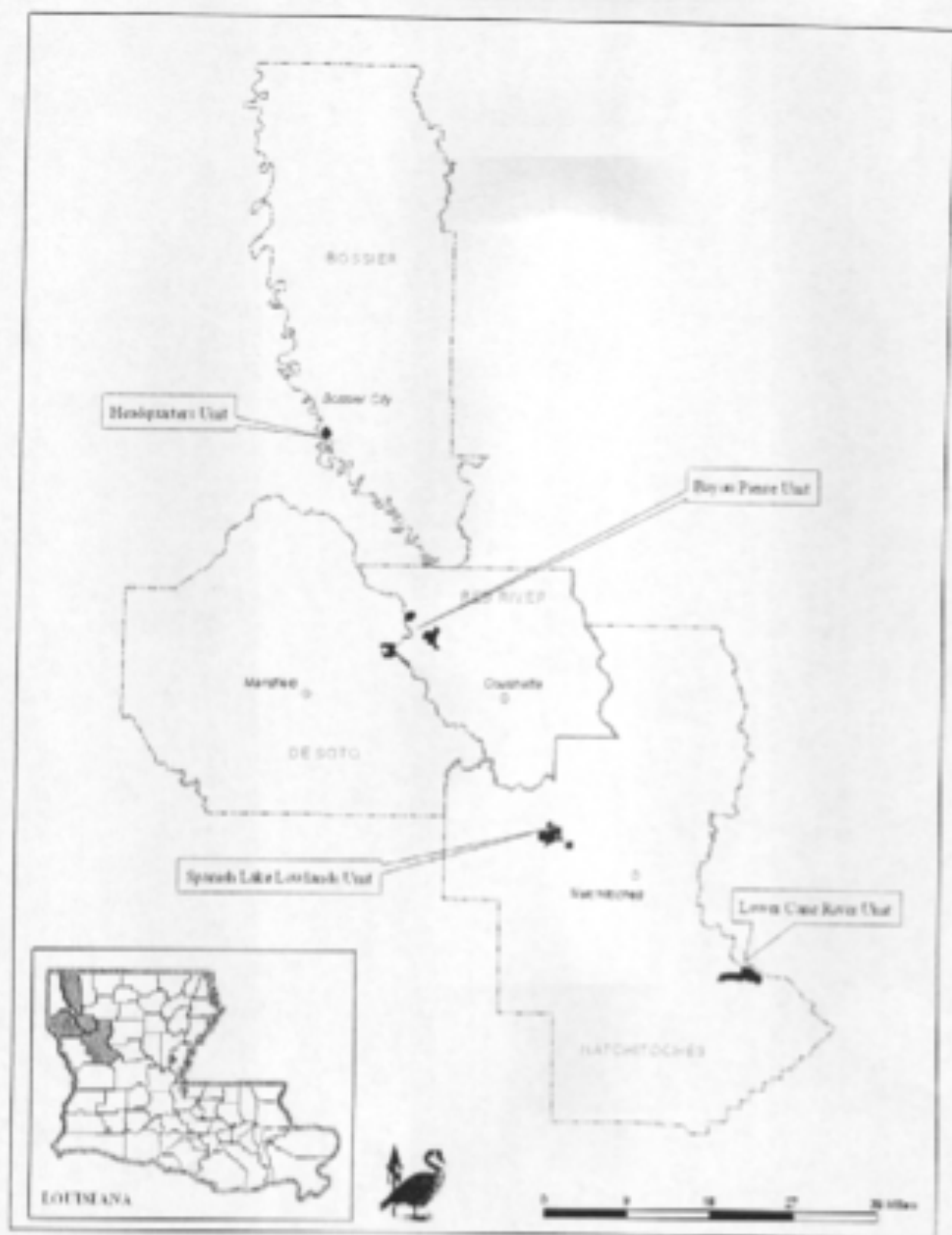


Figure 1. Location of Red River NWR

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**RED RIVER NWR**

**Contents**

6. News Release



**CONTACT—Pat Stinson, Refuge Manager, (318) 742-1219**

United States Department of the Interior – Fish and Wildlife Service

Red River National Wildlife Refuge, 555 Sunflower Rd, Bossier City, LA 71112

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### **U.S. Fish & Wildlife Service Seeks Comments on Draft Sport Hunting Plan and Environmental Assessment for Red River National Wildlife Refuge**

A draft Sport Hunting Plan and Environmental Assessment for Red River National Wildlife Refuge (NWR) in Bossier, Natchitoches, DeSoto and Red River Parishes is available for a 14-day public review beginning November 14, 2008. The comment period will end November 28, 2008.

The plan describes two alternatives for hunting on the refuge: (1) the **no action** alternative would allow hunting to remain at the current status and (2) the **proposed action** would open the entire refuge to hunting. Under the proposed action, hunting of deer, rabbits, quail, squirrels, coyotes, hog, beaver, turkey, dove, woodcock, snipe, rails, and waterfowl would occur. Hunting would be carried out in accordance with Federal and State of Louisiana regulations and refuge-specific regulations.

Copies of the plan can be requested from the refuge and copies are available for review at the following libraries:

Shreveport: 1212 Captain Shreve Drive; Bossier City: 2206 Beckett Street;  
Natchitoches: 450 2<sup>nd</sup> Street

Written comments, requests for the plan, or questions can be directed to Pat Stinson, Refuge Manager, at 555 Sunflower Rd, Bossier City, LA 71112; (318) 742-1219. Email comments can be provided to the following address: [pat\\_stinson@fws.gov](mailto:pat_stinson@fws.gov)

The Red River National Wildlife Refuge is currently 9,787 acres and is located along the Red River in 4 units in Bossier, Red River, DeSoto and Natchitoches Parishes of Louisiana. Wildlife-dependant recreation is available to the public including fishing, wildlife observation, photography, and environmental education.

The U.S. Fish and Wildlife Service is the principal Federal agency responsible for conserving, protecting and enhancing fish, wildlife and plants and their habitats for the continuing benefit of the American people. The Service manages the 94 million-acre National Wildlife Refuge System which encompasses more than 542 national wildlife refuges, thousands of small wetlands and other special management areas. It also operates 70 national fish hatcheries, 64 fishery resource offices and 78 ecological services field stations. The agency enforces Federal wildlife laws, administers the Endangered Species Act, manages migratory bird populations, restores nationally significant fisheries, conserves and restores wildlife habitat such as wetlands, and helps foreign governments with their conservation efforts. It also oversees the Federal Aid program that distributes hundreds of millions of dollars in excise taxes on fishing and hunting equipment to state fish and wildlife agencies.

Sport Hunting  
Decision Document Package  
for  
**RED RIVER NWR**

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7. Letters of Concurrence



**United States Department of the Interior**  
**FISH AND WILDLIFE SERVICE**

North Louisiana Refuges  
11372 Hwy 143  
Farmerville, Louisiana 71241  
Telephone: 318/726-4222 Fax: 318/726-4667



03 November 2008

Mr. Robert Barham, Secretary  
Louisiana Department of Wildlife & Fisheries  
P.O. Box 98000  
Baton Rouge, LA 70898-9000

Dear Mr. Barham:

Please find enclosed a copy of the Red River National Wildlife Refuge Hunting Package. The Service is signing a NEPA compliance document to formally open the Refuge for hunting and to expand hunting opportunities.

We are required to obtain a letter of concurrence from the State of Louisiana for opening more areas of the refuge and expanding hunting. Would your office please provide a letter stating the Department's concurrence with Fish and Wildlife Service's desire to open Red River NWR to additional hunting opportunities? Should you or your staff wish to discuss or have questions please do not hesitate to call me at 318/726-4222. I respectfully request a response by November 30, 2008, if possible.

Sincerely,

George Chandler, Project Leader



BOBBY JINDAL  
GOVERNOR

State of Louisiana

DEPARTMENT OF WILDLIFE AND FISHERIES  
OFFICE OF SECRETARY

ROBERT J. BARHAM  
SECRETARY

14 November 2008

Mr. George Chandler, Project Leader  
North Louisiana Refuges  
U.S. Fish and Wildlife Service  
11372 Highway 143  
Farmerville, LA 71241

Dear Mr. Chandler:

Please accept this letter as concurrence from the Louisiana Department of Wildlife and Fisheries for opening the Red River National Wildlife Refuge to hunting. As managers of the wildlife resources of the state, we recognize the importance of hunting on public and private lands in the management of these resources.

We are encouraged to see the Service providing public recreational opportunities on the refuge by incorporating more hunting opportunities in the management plan. We look forward to future endeavors with the Service in providing sustainable hunting opportunities for the sportsmen of our state. The continued cooperation among public resource management agencies in Louisiana will maintain the Sportsman's Paradise legend of our state.

Sincerely,

Robert J. Barham  
Secretary

c: Kenny Rihbeck

Sport Hunting  
Decision Document Package  
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**RED RIVER NWR**

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8. Outreach Plan

**OUTREACH PLAN**  
for  
**Hunting Plan, Red River National Wildlife Refuge**

**Issue:** Proposed in a plan to manage the hunting program on the Red River NWR.

**Basic Facts About the Issue:** Hunting is:

- An important traditional uses of the area that is now Red River NWR.
- A popular and important outdoor recreational activity on Red River NWR.
- 1 of 6 of the primary public uses of the National Wildlife Refuge System defined in the refuge Improvement Act of 1997.
- A valuable tool for controlling populations that, if left unchecked, could cause damage to the habitats provided by the refuge (e.g. hunting for deer and feral pigs)

**Communication Goals:** This plan will inform the public of the proposed hunting program and foster understanding and support for this and other refuge programs.

**Message:** This proposal provides numerous opportunities for outdoor recreation and provides for control of species that have potential to damage habitats. This proposal also continues and expands traditional uses of renewable resources.

**Interested Parties:**

- Hunters
- Members of the public that currently uses the refuge and those who will learn of refuge offered opportunities and avail themselves of those opportunities in the future.
- Louisiana Department of Wildlife and Fisheries

**Key Date:** November 28, 2008

**Materials Needed:** Press Release, Hunting and Fishing Regulations Brochure. The press release and information for the brochure will be prepared by the Refuge Manager. Brochure information will be submitted to the Southeast Regional Office for publication.

**Strategy:** A news release will be prepared and submitted to area newspapers, radio, and television stations. Requests for presentations about the proposed action will be granted as time and personnel allow.



**Action Plan:**

| Interested Party            | Method of Contact                                 | Person Responsible             | Phone/Fax      | Date     |
|-----------------------------|---|--------------------------------|----------------|----------|
| La. Dept.<br>Wildl. & Fish. | Plan Review,<br>Letter                            | Pat Stinson, Refuge<br>Manager | (318) 742-1219 | 11/14/08 |
| General Public              | News Release<br><i>The Shreveport<br/>Times</i>   | Pat Stinson, Refuge<br>Manager | (318) 742-1219 | 11/12/08 |
| General Public              | News Release<br><i>The Natchitoches<br/>Times</i> | Pat Stinson, Refuge<br>Manager | (318) 742-1219 | 11/11/08 |

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9. Refuge-specific Regulations

## Refuge-specific Hunting Regulations for Red River NWR

Refuge-specific hunting regulations for this program:

A. *Migratory Game Bird Hunting.* Hunting of waterfowl (duck, goose, coot, gallinule, rail, snipe), woodcock, and dove are allowed on designated areas of the refuge in accordance with State regulations subject to the following conditions:

1. Hunters must possess and carry a signed refuge permit.
2. Waterfowl hunting is allowed until 12 p.m. (noon) during the State season.
3. Hunters may enter the refuge no earlier than 4 a.m.
4. Hunting is prohibited within 100 feet of the maintained rights of ways of roads, from or across ATV trails, and from above ground oil, gas or electrical transmission facilities.
5. Leaving boats, blinds, and decoys unattended is prohibited.
6. Recognized dog breeds are only allowed to locate, point, and retrieve when hunting for migratory game birds.
7. Youth hunters under age 16 must successfully complete a State-approved hunter education course. While hunting, each youth must possess and carry a card or certificate of completion. Each youth hunter must remain within sight and normal voice contact of an adult age 21 or older. Each adult may supervise no more than two youth hunters.
8. It is prohibited for any person or group to act as a hunting guide, outfitter, or in any other capacity that pay other individual(s), pays or promises to pay directly or indirectly for service rendered to any other person or persons hunting on the refuge, regardless of whether such payment is for guiding, outfitting, lodging, or club membership.

B. *Small Game Hunting.* Hunting of quail, squirrel, rabbit, raccoon, beaver, coyote, and opossum is allowed on designated areas of the refuge in accordance with State regulations subject to the following conditions:

1. Conditions A1, A4, A5, A7, and A8 (to hunt small game) apply.
2. Possession of firearms larger than .22 caliber rimfire, shotgun slugs, and buckshot is prohibited.

3. Hunting of raccoon and opossum is allowed during the daylight hours of rabbit and squirrel season. Night hunting is allowed during December and January, and dogs may be used for night hunting. The selling of raccoon and opossum taken on the refuge for human consumption is prohibited.
  4. The use of dogs is allowed to hunt squirrel and rabbit after the last refuge Gun Deer Hunt.
  5. To use horses and mules to hunt raccoon and opossum at night, a special permit must first be obtained at the refuge office.
  6. Hunters may enter the refuge no earlier than 4 a.m. and must exit no later than 2 hours after legal shooting hours.
  7. Beaver and coyote can be hunted during all open refuge hunts with weapons legal for the ongoing hunt.
- C. *Big Game Hunting.* Hunting of white-tailed deer, feral hogs, and turkey is allowed on designated areas of the refuge in accordance with State regulations subject to the following conditions:
1. Conditions A1, A4, A5, A7, and A8 (to hunt big game), and B6 apply.
  2. General gun deer hunting is allowed on the days noted. Archery deer hunting is allowed during the entire State season.
  3. The daily bag limit is one either-sex deer. The State season limit applies.
  4. Archery hunters must possess and carry proof of completion of the International Bowhunters' Education Program.
  5. Leaving deer stands, blinds, and other equipment unattended is prohibited.
  6. Deer hunters must wear hunter orange as per State deer hunting regulations on Wildlife Management Areas.
  7. Youth hunters under age 16 must successfully complete a State-approved hunter education course. While hunting, each youth must possess and carry a card or certificate of completion. Each youth hunter must remain within sight and normal voice contact of an adult age 21 or older. Each adult may supervise no more than one youth hunter.
  8. Possession or distribution of bait or hunting with the aid of bait, including any grain, salt, minerals, or other feed or nonnaturally occurring attractant on the refuge is prohibited.

9. Hogs may be hunted during all open refuge hunts with weapons legal for the ongoing hunt.

UNITED STATES FISH AND WILDLIFE SERVICE

ENVIRONMENTAL ACTION STATEMENT

Within the spirit and intent of the Council on Environmental Quality's regulations for implementing the National Environmental Policy Act (NEPA), and other statutes, orders, and policies that protect fish and wildlife resources, I have established the following administrative record and determined that the proposed Hunting Plan for Red River National Wildlife Refuge in Red River, Bossier, Natchitoches and DeSoto Parishes, Louisiana:

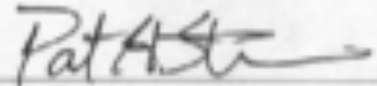
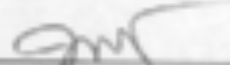

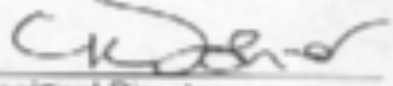
Check One:

- ☐ is a categorical exclusion as provided by 516 DM 2, Appendix 1 and 516 DM 6, Appendix 1, Section 1.4 A (4). No further NEPA documentation will therefore be made.
- ☒ is found not to have significant environmental effects as determined by the attached Environmental Assessment and Finding of No Significant Impact.
- ☐ is found to have significant effects and, therefore, further consideration of this action will require a notice of intent to be published in the Federal Register announcing the decision to prepare an EIS.
- ☐ is not approved because of unacceptable environmental damage, or violation of Fish and Wildlife Service mandates, policy, regulations, or procedures.
- ☐ is an emergency action within the context of 40 CFR 1 506.11. Only those actions necessary to control the immediate impacts of the emergency will be taken. Other related actions remain subject to NEPA review.

Other Supporting Documents:

Endangered Species Act, Section 7 Consultation, 2008  
Compatibility Determination, 2008

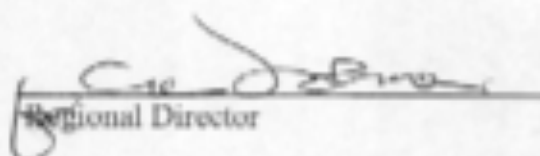
Signature Approval:

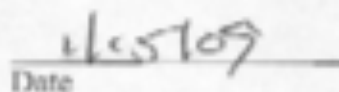
|  |                         |   |                        |
|--|-------------------------|---|------------------------|
| <br>(1) Originator                            | _____<br>Date           | <br>(2) Regional Environmental Coordinator  | <u>1/13/09</u><br>Date |
| <br>(3) Regional Chief, NWRS, Southeast Region | <u>01/14/09</u><br>Date | <br>(4) Regional Director, Southeast Region | <u>1/15/09</u><br>Date |



2. The actions will not have a significant effect on public health and safety (EA, page 14).
3. The project will not significantly effect any unique characteristics of the geographic area such as proximity to historical or cultural resources, wild and scenic rivers, or ecologically critical areas (EA, page 14, 15, 17, 26).
4. The effects on the quality of the human environment are not likely to be highly controversial (EA, page 14, 26).
5. The actions do not involve highly uncertain, unique, or unknown environmental risks to the human environment (EA, page 14, 26).
6. The actions will not establish a precedent for future actions with significant effects nor does it represent a decision in principle about a future consideration (EA, pages 27).
7. There will be no cumulative significant impacts on the environment. Cumulative impacts have been analyzed with consideration of other similar activities on adjacent lands, in past action, and in foreseeable future actions (EA, pages 19-28).
8. The actions will not significantly affect any site listed in, or eligible for listing in, the National Register of Historic Places, nor will they cause loss or destruction of significant scientific, cultural, or historic resources (EA, pages 15, 26).
9. The actions are not likely to adversely affect endangered or threatened species, or their habitats (Intra-Service Section 7 Biological Evaluation Form attached to EA).
10. The actions will not lead to a violation of federal, state, or local laws imposed for the protection of the environment (EA, pages 27-28).

**References:** Environmental Assessment of 2008 Sport Hunt Plan for Red River NWR, Hunting Plan, Compatibility Determination, Letters of Concurrence, Refuge-specific Regulations, Intra-Service Section 7 Evaluation

  
Regional Director

  
Date

## SPORT HUNTING PLAN

UNITED STATES FISH AND WILDLIFE SERVICE

RED RIVER NATIONAL WILDLIFE REFUGE

NOVEMBER 2008

Recommended by Pat H. Stur Date: 12/10/08  
Refuge Manager

Reviewed by Richard P. Johnson Date: 12/11/08  
Refuge Supervisor

Concurrence by [Signature] Date: 01/14/09  
Regional Chief, NWRS

Approved: [Signature] Date: 1/15/09  
Regional Director